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January 1977



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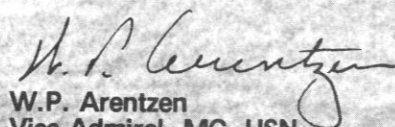
COVER: Medical support for the operating forces was emphasized at the Surgeon General's Eighth Annual Specialties Advisory Conference and Committees' Meeting, held last September. (A report of the proceedings of the first plenary session begins on page 6.) Our cover shows LT Jay O. Brainard, MC, USNR, then a flight surgeon trainee, learning to provide needed support in a practice drill at the Naval Aerospace Medical Institute, Pensacola, Fla. With him is HM3 J. Applegate, USN, then assigned to HCT-16, NAS Pensacola. LT Brainard is now the flight surgeon with Patrol Squadron 11, NAS Brunswick, Maine.

TO ALL HANDS

This will be another exacting year for Navy medicine. Our fleet and Marine units are being called upon as never before to provide the bulwark of our nation's defense. We must recognize that our commitment in support of their efforts is our reason for being, and that this commitment must be firmly established as the first priority for our resources and efforts.

Navy medicine will always make demands that the fainthearted call excessive, but the hardy call challenging. Only the skilled professional can do your work at all; only the dedicated can do it well; and only the deeply compassionate can do it superbly. I know from working with you on the Navy health care team that your ability and your performance are both unquestionably superb.

I am confident you will find in 1977 ample opportunity to grow in service to your country and your patients. May the new year bring you the professional and personal rewards you so richly deserve.



W.P. Arentzen
Vice Admiral, MC, USN
Surgeon General of the Navy



From the Surgeon General

Patients Come First

Some of the most frequent complaints we receive at the Bureau of Medicine and Surgery concern the failure of Medical Department personnel to show courtesy, tact and sympathetic regard for patients and their families. The failure is especially noticeable at points of initial patient contact—central appointment desks, telephone switchboards, patient affairs offices, emergency rooms, pharmacies, laboratories, records offices, information desks, gatehouses, and walk-in or specialty clinics.


Military and civilian personnel who work in these areas where patients first "meet" the hospital play a crucial role in conveying the feeling that Navy medicine is there to help the patient. It is essential that the assistance provided truly reflect the spirit of caring for which the Navy Medical Department stands. No matter how excellent and expert the medical care itself, an early impression of nonchalance, disregard, rudeness or neglect of the patient's needs reflects poorly on the facility's efforts and achievements. In particular, staff members should maintain a professional attitude throughout their work. There is no place for off-handed remarks or jokes in the presence of patients; what may be commonplace to us may frighten the patient, or be easily misinterpreted.

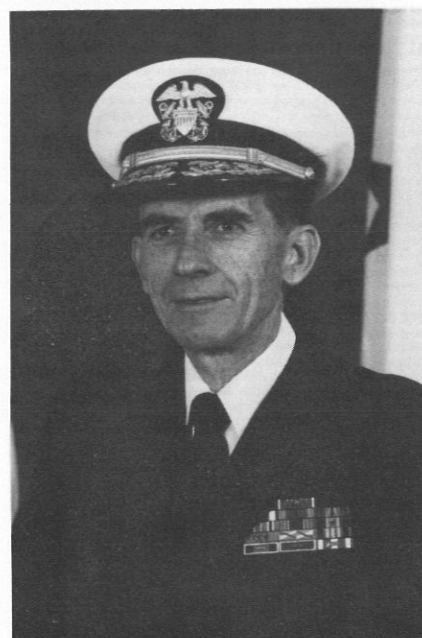
By example and precept we must show that no complaint is ever too trivial: every problem deserves our best response.

My first concern is and always will be sympathetic support for the patients who have been entrusted to us. To ensure that the issue of courtesy receives the command attention it deserves, I have directed that each person assigned to an initial patient contact area receive instruction in dealing with patients. The training curriculum will stress the objectives of the Navy medical system and the important role of the Medical Department member in every area of patient care. This educational effort should be continuous, to meet the needs of personnel turnover.

I have also asked that a copy of each training curriculum be forwarded to the Bureau of Medicine and Surgery, along with a description of other action commands are taking to ensure courteous response to patient needs. In future inspections, the Inspector General will be paying close attention to our professional performance in initial patient contact areas.

I know you share my conviction that the quality of Navy medical care must not be degraded by thoughtlessness or other evidence of not caring about patients. I feel certain that renewed efforts to correct such deficiencies will reassure our beneficiaries that—in Navy Medical Department facilities—patients come first.


W.P. Arentzen
Vice Admiral, MC, USN
Surgeon General of the Navy



VADM Arentzen

Department Rounds

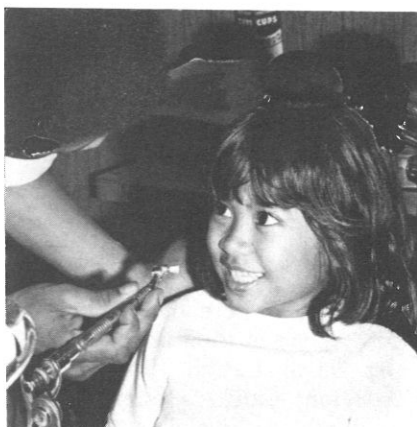
During National Children's Dental Health Week the message is

Smile, America!

Navy dental officers and dental technicians are preparing their support for National Children's Dental Health Week, to be observed 6-12 Feb 1977. Sponsored by the American Dental Association to encourage good oral hygiene habits among children, the week repeats last year's theme: "Smile, America!"

Wherever possible during National Children's Dental Health Week, the Navy Medical Department will sponsor dental education and treatment programs for the children of Navy and Marine Corps members, so long as these programs do not interfere with the primary mission of providing dental services for active-duty personnel. Programs will usually be conducted during off-duty time to enable the largest number of children and parents to participate.

Imaginative. Successful projects undertaken at Navy medical and dental facilities during the 1976 National Children's Dental Health



Good oral hygiene is highlighted . . .

Week may inspire equally imaginative efforts this year. Here are some highlights of last year's programs:

- At Naval Regional Medical Center, Corpus Christi, Tex., children of active-duty and retired military personnel attended a slide show that explained the dangers of dental plaque and the consequences of ignoring oral hygiene. Next, dental technicians demonstrated proper brushing and flossing techniques. A dental officer then examined each child's teeth and applied topical stannous fluoride. The children left with gift packs containing a toothbrush, toothpaste, disclosing wafers, dental floss and a disposable

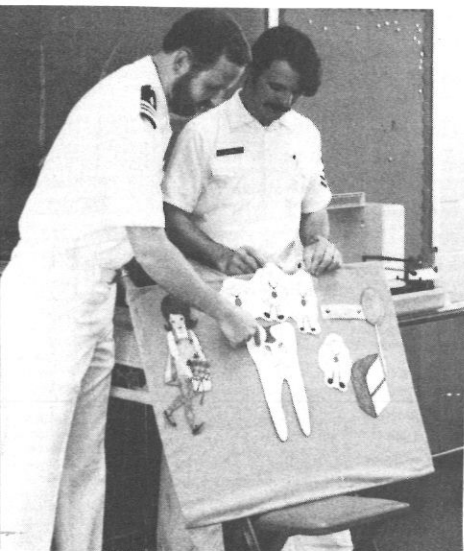


. . . during dental health week.

© 1976 American Dental Association



American Dental Association poster



Clever teaching techniques help . . .



. . . interest children in dental health.



Checkup time for a Navy dependent

plastic mirror. Parents were notified if their children needed dental treatment, and were reminded to visit their family dentist regularly.

- Dental officers of the USS *Grand Canyon* (AR-28) manned a pierside preventive dentistry unit at Naval Air Station, Mayport, Fla., where they cleaned and examined the teeth of 156 children, including many dependents of *Grand Canyon* personnel.

- Art projects undertaken by students from the Matthew C. Perry School at Marine Corps Air Station, Iwakuni, Japan, helped bring the "Smile, America!" theme to life. One kindergarten class constructed a huge papier-mâché tooth; a fourth-grade class wrote and illustrated stories about animated toothbrushes and tubes of toothpaste. Seven of the children appeared with their art teacher on a local television show to talk about their projects and the importance of dental health.

- At Naval Training Center, Orlando, Fla., dental technicians wrote a skit on dental care, and performed it in six area schools. Television clown Ronald McDonald hobnobbed with children in the dental clinic, staging games and talking about dental care. During the week-long program, dental officers examined more than 1,000 children.

- At Naval Training Center, San Diego, Calif., a cartoon slide program introduced children to principles of oral hygiene, including the

signs of early dental disease, how to remove plaque, and how to check plaque removal with disclosing tablets. Later, in a plaque control room and under the supervision of a dental technician, parents and children looked through a phase microscope at live plaque microorganisms, and tried out techniques of plaque control. Parents stood at the side of the dental officer during their children's examination, and were shown where their children's oral hygiene needed improvement.

- At Naval Dental Clinic, Camp Pendleton, Calif., a dental officer and dental technician visited each school on base. The dental team

used cartoon posters to explain the causes of tooth decay, and asked some students to chew disclosing tablets so classmates could see the plaque-covered areas. In one of the most successful projects, a few students dressed in pillow cases to look like teeth, and other students used these "pillow-case teeth" to practice flossing and brushing.

Armed with such appealing teaching techniques, Navy dental teams got their message across last year. This year, parents and children will again benefit as Navy dental officers and technicians lend their talents to support National Children's Dental Health Week.

BUMED SITREP

MEDICAL RECORDS . . . Recurring errors in the maintenance and disposition of health care treatment records have been noted by the Inspector General, Medical, and other inspection and audit teams. To help Medical Department activities review their record-keeping, BUMED Notice 6150 of 2 Nov 1976 identifies the most commonly reported errors, and for each error cites the applicable directive.

AUDIT TIPS . . . Medical Department activities should review these management areas:

- NAVSO P-3006, par. 501-2 requires quarterly reviews of unfilled orders.
- BUMED Instruction 6700.36 requires establishment of a preventive maintenance program for medical equipment.
- NAVMED P-117, par. 21-4 requires monthly or, if necessary, more frequent *surprise* inventory of controlled substances, to be accomplished by an appointed inventory board.
- BUMED Instruction 6770.2B requires that a linen committee be established, and that linen be properly accounted for and secured.

AMHTS DEBUT SET . . . The National Naval Medical Center is readying a site for the Navy's first automated multiphasic health testing system (AMHTS), scheduled to be installed this spring. Plans call for a staff of one medical officer, one nurse, 12 health screening

technicians and four clerical workers.

The computerized system measures physiological performance, such as visual and auditory acuity, and prints the results on Standard Form 88 or in narrative form. Physical examinations of active-duty personnel and pre-admission screening examinations will be conducted through the new system.

DR. CURRERI LEAVES USUHS . . .

Anthony R. Curreri, M.D., first president of the Uniformed Services University of the Health Sciences, resigned that post in November after a three-year term to resume his former position as professor of surgery at the University of Wisconsin School of Medicine.

CLINIC CLOSES . . . The Potomac Annex branch of Naval Regional Medical Clinic, Washington, D.C., will be disestablished 1 March 1977. Health records for active-duty personnel are being transferred to the branch clinic at the Navy Annex, Arlington, Va.; records of non-active-duty health care beneficiaries are being sent to the outpatient clinic at the National Naval Medical Center, Bethesda, Md. Patients formerly seen at the clinic may receive care at the National Naval Medical Center, and at nearby branch clinics. Podiatry and eye clinics will be added to the Washington Navy Yard clinic, while dermatology services there will be discontinued.

Letters

TURNOVER TIME

I'd like to give my cohorts who await their "watch" at sea some insight into fleet medical support. My own tour was a "Med cruise" aboard the USS *Detroit* (AOE-4) from 19 Aug 1975 to 27 Jan 1976. When the *Detroit* was replaced in the Mediterranean by the USS *Seattle* (AOE-3), I provided the following turnover information to the *Seattle*'s medical officer:

Welcome to the Mediterranean Sea, your habitat for the next several months. You will find the pace demanding, at times invigorating and at times frustrating. You will soon learn (if you have not already) that you are first a naval officer, then a general medical officer, internist, surgeon, urologist, psychiatrist, orthopedic surgeon, radiologist, ophthalmologist and dermatologist all rolled into one!

Now a few words about division personnel. Your chief petty officer is a valuable asset to your shipboard health care team. He has had years of experience as a hospital corpsman and administrator, and he can help you hurdle mountains of red tape. Let him run many of the routine operations of the department. If you usurp his authority by making every decision yourself, you will find yourself engulfed by a mountain of paperwork that could easily have been delegated. So share some of the burden; there will be plenty of times when, as department head, you will have to make ultimate decisions.

Your supply petty officer is also an important member of your team. He must make a daily mental inventory of your materiel, and must know when, where and how much to order so you don't run out. You're not tied to a pier anymore, so you can't get daily supplies. The medical facilities at your ports of call will provide supplies in emergencies, but they have limited budgets and inventories. So order your supplies through the established fleet supply procedures, and work out your needs through your own budget and with your own supply petty officer.

An AOE—a fast combat support ship—can be a dangerous place to work, with an abundance of heavy machinery, span wires, and fueling rigs. During underway replenishment exercises and routine evolutions, your

medical department personnel should watch for any unsafe activities or violations of safety rules.

The types of injuries we encountered most frequently on the *Detroit* were musculoskeletal injuries and injuries caused by chemicals. Navy distillate fuel, JP-5 turbine fuel, and Cellulube-type hydraulic fluids can get into the eyes of crewmembers. Always have a liter of normal saline near your surgical scrub sink for irrigating the eyes.

Another common problem was digital fractures when fingers and toes were crushed by hatches, doors and machinery. One man suffered an angular avulsion through the distal phalanx when a barrel dropped on his finger; adequate debridement and a pedicle graft, performed on board immediately after the injury occurred, saved the terminal aspect of his finger.

Early in the cruise we saw many pyogenic and fungal skin infections. The weather was hot, the men worked long hours at underway replenishment stations, and personal hygiene suffered. In spite of aggressive therapy, many man-hours were lost, primarily because of pyogenic infections; we confined men with these infections to the ward to prevent the infection from spreading among the crew. We encouraged the men to practice better hygiene, and the problem was eventually solved.

A common problem on ships that carry groceries is insect infestation. Our commanding officer invited staff members of the Environmental and Preventive Medicine Unit No. 7 in Naples to come aboard. Their assistance resulted in a dramatic improvement in our insect problem. They also pass on other information useful for ships entering the Mediterranean. You will find their visit highly valuable, but remember—they can't visit you unless they receive an invitation from your command.

Because you are on an AOE, you have helicopters at your disposal for medical emergencies, assuming you are within flying range of a naval shore facility or a carrier. If you have an emergency or a serious medical problem and have the option to use medical evacuation, use it. We had two such emergencies: One man presented with a textbook case of gallbladder obstruction. We happened to be within range of the naval clinic at Sigonella, Sicily, so we wired ahead for assistance, and within minutes of touching ground in Sigonella, our patient was on an aeromedical evacuation plane to Naples. In fact, he was in Naples before

we could get from Sigonella back to the *Detroit*.

Our second medical evacuation involved a crewmember who had an idiosyncratic reaction to an influenza immunization. Shortly after he was vaccinated, he presented with malaise and a temperature that climbed to 105.8° before we saw evidence of lysis. Even then, the patient's temperature remained at 104°. By the time we got the patient to Sigonella, his temperature was down to 102° and his reaction was subsiding. He was flown to Naples, observed, and released in a few days.

As medical officer, you should provide the most sophisticated care you can for the seriously ill patient. That last patient might have recovered on board, but had he died, we would have had to ask ourselves, "Did we use every means at our disposal to provide the best possible care?"

One last recommendation: take advantage of your tour. Go ashore when possible and get your mind off your work for awhile!

LT Robert J. Allen, MC, USNR
NRMC Portsmouth, Va. 23708

FLEET MARINE FORCE

I read with interest the article entitled "Next Stop: Newport" [*US NAV MED* 67(3):14, March 1976]. The article, which appeared to cover all information medical students may need while at Newport, did not mention an area that could impact on the medical officer's future assignments: the role of the medical officer when serving with the Fleet Marine Force. While the omission was probably an oversight, I would like to point out that some of the students may be assigned to a tour of duty with the Fleet Marine Force, and that the course content at Newport should include information concerning duty with the Marines.

CAPT D.R. Hauler, MC, USN
Headquarters U.S. Marine Corps
Washington, D.C. 20380

As CAPT Hauler notes, the omission of duty with the Fleet Marine Force was an oversight. In the Officer Indoctrination School curriculum, 12 hours are devoted to Medical Department topics; the rest of the time is given to general naval orientation and training. Part of that 12-hour medical track is devoted to the various types of duty a medical officer might be called upon to perform, including duty with the Fleet Marine Force.—BUMED Code 0011-1.

Special Report

The Surgeon General's 8th Annual Specialties Advisory Conference and Committees' Meeting

Accountability in Graduate Medical Education

This conference was held 20-24 Sept 1976 in Arlington, Va. The following report of this annual session represents an edited (sometimes paraphrased or abbreviated) version of the remarks and presentations of specified individuals. Their comments do not necessarily reflect official views of the Navy Department or the naval service at large.—Ed.

PROGRAM

Monday, 20 Sept 1976

- 1300 Registration
Begin review of applicants
- 1900-1930 Committee chairmen meeting

Tuesday, 21 Sept 1976—First Plenary Session

- 0830-0845 *Administrative Announcements*
CAPT J.S. Cassells, MC, USN
- 0845-0900 *Welcoming Remarks*
RADM J. William Cox, MC, USN
- 0900-0930 *A Rationale for Graduate Medical Education in the Navy*
CAPT J.S. Cassells, MC, USN
- 0950-1020 *Manpower—The Requirement Base*
RADM E.J. Rupnik, MC, USN
- 1020-1035 *Medical Corps Manpower*
CAPT R.E. Strange, MC, USN
- 1035-1100 *Operational Medicine Support: Another Look*
CAPT J.J. Quinn, MC, USN
CAPT J.D. Bloom, MC, USN
- 1100-1130 *Continuing Medical Education: An Expanding Requirement*
CDR B.G. McAlary, MC, USN
- 1130-1215 *Panel Discussion*
RADM J.W. Cox, MC, USN
RADM R. Laning, MC, USN
RADM E.J. Rupnik, MC, USN
CAPT J.S. Cassells, MC, USN (moderator)
CAPT J.J. Quinn, MC, USN
CAPT R.E. Strange, MC, USN
CDR B.G. McAlary, MC, USN
- 1215-1230 *Instructions to the Specialties Advisory Committee Conferees*
CAPT J.S. Cassells, MC, USN
- 1330 Committee workshops. Review of applicants. Appointments with BUMED Codes 31, 311, etc.

Wednesday, 22 Sept 1976—Second Plenary Session

- 0830-0930 *Perspectives of the Navy Medical Department*
VADM W.P. Arentzen, MC, USN
- 1000-1200 Committee workshops
- 1300 Committee workshops. Appointments with BUMED Codes 31, 311, etc.

Thursday, 23 Sept 1976

- 0800-1200 Committee workshops. Continue review of applicants at individual committee chairmen's discretion.
- 1400 Review and collation of slates. Compilation of major issues resulting from committee workshops.

Friday, 24 Sept 1976—Third Plenary Session

- 0900-1015 Discussion of major issues. Surgeon General commentary.
- 1035-1140 Discussion of major issues continued.
- 1140-1200 *Closing Summation*
RADM J. William Cox, MC, USN

FIRST PLENARY SESSION

Welcoming Remarks

RADM J.W. Cox, MC, USN
Special Assistant for Medical Department Education and Training, BUMED Code 0011

Last year, I said in the concluding remarks that the Specialties Advisory Conference is not an infant. It is a mature, effective, responsible and experienced congress of professionals who gather each year to address the issues, to lay plans for answering future problems, and to determine strategies for accommodating to an ambiguous and often hostile environment.

The record of this conference over the last eight years speaks for itself. It is unnecessary for me to make an inventory of numerous innovations and improvements that have transpired in the Medical Department as a direct or indirect outcome of deliberations at SAC. When we began, most of our efforts were directed at problems related to graduate medical education. But as

their experience and knowledge and sophistication grew, the SAC committees addressed other issues only indirectly related to graduate medical education and have helped bring about many improvements in the Navy Medical Department.

It is no secret that since 1973 the base budget for education and training, across all appropriation lines, has fallen approximately 30%. Nevertheless, most essential programs have been maintained. Believe it or not, when we look at priorities and consider the essentials, we are almost in as good a position as we were in 1973. That achievement is the result of the sage advice and counsel of this conference. You have truly demonstrated accountability in graduate medical education.

In welcoming you, I must point out that the environment is even more hostile as we face fiscal year 1977. Bear this in mind as you listen to the SAC speakers, who will discuss some of the major issues and problems facing us with regard to medical education and the operation of specialties within the Medical Department. As you move into your individual groups, please remember that this is primarily a forum for the transfer of information, and for some exchange of unsubstantiated opinion. After an appropriate amount of information exchange, with a minimum amount of unsubstantiated opinion exchange, I ask that you try to reach a consensus—one that recognizes the reality of our situation but is not bound by artificial constraints. Try to articulate the alternatives that are available, and make responsible and thoughtful recommendations for mechanisms by which we can ameliorate existing problems, cope with future problems, and accommodate to an ambiguous and hostile environment.

Your reports will be reviewed in detail at the Bureau of Medicine and Surgery, although reports from individual committees do not automatically generate a Bureau action. After you have made the reports, if you believe action is required from your own medical center, draw up the plan and forward it through channels with specific recommendations and resource requirements, and we in the Bureau will consider it very seriously.

VADM Arentzen (center) leads discussion at SAC 8



Perspectives of the Navy Medical Department*

VADM W.P. Arentzen, MC, USN
Surgeon General of the Navy

I am pleased and proud to be able to extend my belated welcome to you as you proceed with the work of the eighth annual Specialties Advisory Conference. From what I have been told, you have begun your deliberations with the same spirit of enthusiasm and hard work I have learned to expect from the years many of us shared together in our hospitals.

Looking out over the audience here, I must say it makes me a little homesick for the field, because you people are, believe it or not, where the real action is. You are the real front lines of Navy medicine.

In this, my first time to address this conference, I will admit that my perspectives are still very much those of the commanding officer of a graduate training hospital. In my remarks today, I will try to combine that perspective with the view I am rapidly gaining of the overall needs of the Navy, and to indicate to you the role for our programs which I wish to see emphasized and developed.

I am fully aware of the size of the job you are tackling in the several days of this conference. For my part, I want to avoid trying to channel your thoughts into patterns of thinking which are restrictive or limiting of the wide range of your imagination as you work to develop innovative approaches to meet our clear mandate: to match our training to the needs of the Navy, the Marines, and our entire beneficiary population.

Consider this: 35,000 inpatient health care facilities; 7,000 hospitals; 22,000 nursing homes; 4 million employees; 228,000 unoccupied beds; 14 million surgical procedures; 200 million outpatient hospital visits; 800 million physician encounters; all at a direct cost of over \$100 billion, of which well over \$40 billion is funded by our federal government. This staggering total represents over 8% of our gross national product, and that figure could double, even triple within 10 years.

Is it any wonder that we, as part of this massive effort directed toward providing adequate health care for our nation, are subject to being counted and recounted, analyzed and scrutinized, scrubbed and rescrubbed as never before? The medical departments of the three armed services—existing as we do at the sufferance of Congress and its regulatory agencies—will be in the forefront of the effort to carve, mold and develop a health care system which can be controlled and paid for.

In a study entitled "A Forward Plan for Health, FY 1976-1980," published in June 1974 by the U.S. De-

*VADM Arentzen's address was delivered at the second plenary session on 22 Sept 1976.

partment of Health, Education and Welfare, a new doctrine is unabashedly presented: they wish to work with the Department of Defense and the Veterans Administration in opening health care facilities in "scarcity areas" to provide health care to civilians who otherwise would not have qualified for care. This policy—now only in its infancy—reflects a growing consensus at the federal level that high quality health care, and the resource base needed to achieve it, is unattainable except by government intervention. The architects of this master plan would try to correct what unquestionably are gross inadequacies, namely:

- a shortage of health services personnel and facilities for the urban poor, and in the low population density areas of the country.
- high and still rapidly rising costs of health services, with no indication that a leveling off point will be reached in the near future.
- fragmentation of the health services system with, as a result, patients unable to find help, even when available.
- the perception that the fantastic financial, technological and human capital expenditures made by this country have not resulted in significant improvement in the nation's aggregate health level.

The same perceived inadequacies which have forced development of a federal national health plan have further resulted in the military health system coming under the scrutiny of federal analysts. In the year since your last meeting, a joint task force from OMB, DOD and HEW has published a report entitled "The Military Health Care Study." This report, the product of almost three years of work, will represent our "Forward Plan for Health."

This report made recommendations which will impose on us a radically different Navy health services system than that which we presently operate. These things are happening:

- Contingency requirements are being updated. Force size will be tied to that necessity. Training will be tied to contingency needs.
- Capitation budgeting is being studied—not to determine feasibility, but *how* to achieve it.
- A uniform cost accounting system is being developed.
- The mechanism to update CHAMPUS reimbursement on an annual basis is being developed.
- A CHAMPUS consumer appeal system is being initiated.

In addition to these changes, all of which are now happening, other recommendations of the report are being studied to determine how to implement them. These recommendations are:

- A central entity to plan and manage health care delivery programs in fixed facilities.
- DOD contracting for health care in the U.S.
- Offering beneficiaries the choice of alternate health care plans.

In some form or another, these recommendations represent the reality of the future. In some form or another, they will serve as the structural underpinning on which will be built the health care system of tomorrow's Navy.

At the same time these portions of tomorrow's system are being formulated, the same restrictive philosophy has resulted in a loss of resources in OPN and O&MN dollars of almost \$20 million over the past three years. In the same three-year period we have lost \$12 million from our training base. Simultaneously with these restrictions and losses in our resource base we have been asked to accommodate to the realities of the all-volunteer force, with its loss of draft-driven accessions and the superb Berry Plan resources. At the same time, the Congress has asked us to provide an increased opportunity for inpatient care in our medical facilities to reduce the outlay of CHAMPUS dollars. Our line and Marine leadership rightly expect and deserve an expanded capability in support of their mission. In addition, expanding technology, altered concepts and improved modes of patient care, increasing consumer demands, and even legislative action have contributed to the resource demand which we must accommodate if we are to continue to provide the level of care to which we are committed.

Putting it bluntly, we are in a crisis. If we are to meet this crisis, if we are to manage the change and modify the impact of what we can see taking place around us and to us, it is mandatory that we look coldly and dispassionately at our own internal institutions and processes to determine if they are what we think they are, doing what we think they do, and accomplishing what we know must be done.

The most important and sensitive of these institutions is the graduate training hospital. Perpetuation of its role as a provider of trained specialists is your reason for being here. There is little question that this traditional and long revered role, with its concentration of specialist and technical resources, has resulted in the highest standards of patient care. However, it is this very concentration of talent—to the exclusion of our wider mission—and the denial of this talent to our operating forces and other health care units which have made our graduate training hospitals so sensitive to attack and dismemberment. This same intellectual elitism has contributed to the establishment of a two-caste Medical Corps: the first occupies the more favored positions in our major hospitals; the second is doomed to perpetual second-class status among our operational forces and at our less attractive duty stations.

Please do not construe my remarks to mean that I advocate the downgrading of our graduate training hospitals. To the contrary, I am advocating their reestablishment on a foundation of relevance to and participation in the entire spectrum of Navy health care activity. What I ask you to consider is that we look upon our graduate training hospitals as *educational regional*

centers—educational regional centers which will furnish the leadership core around which training programs can be built, not only in the clinical specialties, but in all the wide areas of medicine pertinent to the Navy's needs. I visualize our teaching centers as dynamic hubs of know-how, with people and equipment constantly interchanging and fully interfacing with the region they serve, and with the Navy as a whole.

This is not empty rhetoric. In my remarks at the recent retirement of VADM Custis, I clearly stated that I am totally dedicated to the enduring support of our fleet and our Marine Corps, and that I considered nothing else as important. *If we fail to recognize this reality and to exploit the uniqueness of Navy medicine in the totality of fleet and Marine support, then we will write our own obituary.*

We have made a start. Based on previous policy, as you make your selections for training programs this week you will be granting priority to the medical officer who has served in the fleet. Graduating seniors selected for first-year training positions next July will reflect our policy of expecting most of them to serve in an operational support role before continuing with more specialized training.

Several weeks ago, I requested Admiral Cox and his staff to prepare a curriculum for basic operational and shipboard medicine. This has been done to my full satisfaction. This curriculum, directed toward preparing our trainees at graduate level one to assume meaningful and knowledgeable roles in operational support, will be initiated this year in our graduate training hospitals. It will be your responsibility to make it work. I am fully aware of the accommodations on your part which this will require.

One of the major problems which I alluded to earlier is the two-caste system—operational and hospital-based corps working independently of each other. Perpetuation of this dichotomy and the resultant disenfranchisement has led to the increasing dissatisfaction of many excellent physicians who have, or would have, chosen this career pathway. Our hospital-based Medical Department has lost sight of the reality *that the operational officer is in every sense of the word a physician*. He, too, wants, expects and deserves the opportunity for professional development. As a physician, he should be provided an opportunity to interact with the wide range of patients enjoyed by his hospital colleagues.

Sea tours and frequent moves further contribute to the disruptiveness of his career. Is it any wonder that we have difficulty maintaining the numbers we require? I propose to change this. I am directing that opportunities be provided for this dedicated group of physicians to return to our hospitals for abbreviated periods of training, a so-called "mini-residency." This mini-residency will provide, on an "as needed" basis, training in clinical areas which will complement their not inconsiderable skills and make it possible for them

to serve full and meaningful tours in our large hospitals and teaching centers, gaining and regaining the patient care and hospital experience they have so frequently lacked.

These initiatives, together with the development of the new operational medicine training continuum, will help us achieve the professionalism and expertise we need to support the operational Navy, and will provide career development for physicians involved in operational medicine.

As a further step towards integrating our corps, I am insistent that our senior clinicians be assigned under the single manager pool concept to billets on ships and with our Marine units. This policy, combined with a policy of bringing operational specialists back to the hospital environment, will ensure that our Navy Medical Department is truly a team—a team in which each member knows the full ramification of the Navy of which he is a part.

The graduate training hospitals, which you so ably represent, are both our failure and our future. They are our failure because they have developed in a direction which does not recognize the true range of the Navy mission. The narrow parochialism we have allowed to continue has fostered an isolation from the realities of today. Go back to your deliberations, and eventually to your hospitals, and ask yourselves these questions:

Is the first priority of your command patient care? We must never lose sight of why we exist.

Are you training in the most efficient and effective manner possible? Are you using the tremendous potential of your trainees to deliver better patient care?

Are you providing the type of training needed? Have you yourselves made an unqualified commitment to providing the spectrum of training we need? Are you yourselves ready and able to assist in this effort?

Are you using the full potential offered by your regional clinics to teach ambulatory care medicine?

Are you using the full potential offered by the operational units and facilities in your region to augment your operational medicine training?

Are you making it possible for the operational medical officers in your regions to avail themselves of training opportunities in your hospitals?

Are you helping to provide needed training in clinical skills for the independent duty corpsmen and crewmembers assigned to ships in your area?

Have you clearly thought out the role of the hospital in the overall Navy Medical Department teaching effort? Are you doing what you should be doing? Should your role be changed? Should you have different programs? You are in a better position to assess these things than we are.

Have you created an environment for education? Is it vibrant and vital? Is it exciting? If not, why not?

Have you looked closely at the medical schools in your area? Have you developed as close a supportive partnership, within your resources, as you can? I am

convinced that when the final showdown comes, having the civilian medical education community in our corner will be one of our greatest assets.

Is your library the best possible? Have you taken every opportunity to develop short courses, seminars and workshops within your region? Are your physicians able to avail themselves of travel opportunities for continuing education? I am insistent that available funds be used for this purpose and not directed to other areas.

Are you assessing the role of each officer on your staff and in your department? What is his or her contribution? We cannot afford the luxury of noncontribution; we cannot afford dead wood. We must constantly examine, review and reappraise each member of our force to ensure maximum effectiveness.

Are you innovative? Our resources are limited. I see no indication, at least in the near future, that they will be any less so, nor that our responsibility will lessen. Effective management must be sensitive to continuing change for improvement. Our results must be the measure of our success.

The Navy—and our Bureau—is presently engaged in a program of management by objectives. For me the concept is extremely simple. There need be only one objective: *to support our Navy and Marines to the best of our ability*. Our commitment to this objective must be total. I know you share it with me.

You are our leaders. Your talent and efforts are essential if we are to guide our system through our turbulent future. Your past record is superb. I have faith in all of you. There is no doubt that you can meet today's new challenge. We depend on your efforts. Tomorrow's Medical Department rests squarely in your hands.

A Rationale for Graduate Medical Education in the Navy

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It is ironic that "A Rationale for Graduate Medical Education" should be the subject of a presentation at a specialties advisory conference in its eighth year. Nevertheless, the subject is one that requires a statement now.

Three of the questions most commonly asked about our graduate medical education programs are: How much do they cost? Why do we train our people at all? To what extent do the training programs create a workload that would not otherwise exist? On the surface they appear to be rather straightforward questions, but there are constraints on our answers. This is the age of the systems analyst. Moral commitments, words like "quality," and so forth are not quantifiable, and therefore cannot be reduced to numbers; so these important

considerations are not permitted to contaminate our responses to the questions.

There was a time when we didn't have graduate medical education in the Navy. Does anybody remember what it was like? I think it might be useful to look briefly at the trends in naval medical education over the past 50 years. This period can be split into four separate eras characteristic of Navy medicine in general. The era from 1920 to 1940 was the period of pre-specialization. From 1941 to 1945 was, of course, the period of the Second World War. From 1946 to approximately 1973, an organized Navy health care system was developed. Since 1973 we have been in an era of consolidation.

As early as 1920, the Navy recognized the legitimacy of internships: year-long periods of supervised hospital experience to develop practical skills were authorized, and used to help physicians make the transition from civilian medical-school graduate to practicing general medical officer. Until 1940, structured education was limited. The active-duty population had been demobilized after World War I and the number of Medical Corps officers was miniscule compared to today. Cruises meant long shipboard medical practices conducted in isolation. Both the science and the technology of medical practice were underdeveloped.

As medical specialization began to emerge in response to civilian scientific progress, the Navy adapted, offering short-term, general refresher courses to its medical officers. By 1930 sponsored study for six months, and occasionally for up to one year, was allowed in certain civilian hospitals, but in only a limited number of specialties. The dominating arguments favored severe curtailment of specialized preparation, regarding specialization as superfluous to the generalist character of active-duty health care needs.

As the Navy Medical Corps rose to 12,000 physicians during World War II, it was apparent that the skills, experience and capabilities civilian specialists brought to the Navy contrasted sharply with those of the general medical officer. In particular, the GMO showed a markedly limited ability to help patients recover from diseases or combat wounds. The compartmentalization of scientific principles and medical practice was apparent to even the most casual observer. In addition, the long duration of the war severely curtailed opportunities to maintain and develop the health care skills required to provide comprehensive health care to a waiting civilian population. After demobilization, specialization and residency opportunities responded to that need.

With the military medical experiences of the 1920's and the 1930's in mind, Navy medical planners in the mid 1940's set the stage for the growth and development of a comprehensive health care system. The Navy and its sister services could ill afford anything less than complete health care capability. That capability is now unmistakably linked with increments in medical service to its personnel.

Supported primarily by the physician draft, with its compulsions and complications, an in-house health care support system evolved. But as continuing dependence on draft-driven programs became a national issue in general, and a special issue within the Navy, it became necessary to develop alternative and dependable sources of medical officers with specialty skills and experience. And as civilian medical departments cemented their reputation by sponsoring educational programs, so also did the Navy Medical Department.

In recent years, a number of new but overriding issues have developed: shrinking assets, severe competition for Department of Defense resources, and a requirement to demonstrate exactly how much health care should be provided and at what cost. So the last phase of this abbreviated history can be called the era of consolidation, from which has come the requirements-based Navy health care system.

Table I shows the development of the Navy residency programs from their beginning in 1947, when about 9% of the Medical Corps was in training. By 1975 that had risen to 27%, which is what it is today when we have approximately 1,020 people in training. The fact that 27% of the Medical Corps is in training at any one time is of particular concern to our critics. Each year, during the POM (programs objectives memorandum) cycle we have to justify that figure.

TABLE I. Historical Perspective of Naval Residency Programs

Year	Corps strength	Total number under training	Total percent under training
1947	3451	310	9.00%
1948	2928	392	13.40%
1949	3235	357	11.03%
1950	2676	306	11.00%
1951	4532	187	4.12%
1952	4145	218	5.25%
1953	6157	483	7.84%
1954	3485	153	4.40%
1955	3355	287	8.55%
1959	3291	472	14.34%
1962	3490	377	10.80%
1963	3523	391	11.10%
1970	4524	613	13.55%
1971	4253	610	14.34%
1972	4450	635	14.27%
1973	3955	676	17.09%
1974	3403	847	24.89%
1975	3391	931	27.46%

Military forces will continue to exist. Their mission is to plan and carry out national security policy, as directed by the President, through the National Security Council and the Joint Chiefs of Staff, and as implemented by the Department of Defense. It follows, then, that contingency planning must form the base for manpower and materiel requirements. Health care is an essential element in any such planning.

Contingency planning in isolation, however, is inherently wasteful: contingency forces must be effec-

tively employed in the noncontingency period. It is therefore essential from the outset to comprehend the Navy health care support system in its two major organizational and philosophical configurations.

The defense program and planning guidance (DPPG) memorandum—of which you will hear a great deal this week—defines the primary mission of the military health care system: to provide medical support necessary to assure combat readiness and conserve military fighting strength in time of war. Resources may be programmed to provide care and treatment of other than active-duty members in certain situations; these include (1) if adequate health care facilities are not available, such as overseas or at underserved locations; (2) if the cost of treating dependents and retirees in military facilities is less than the alternatives; or (3), and this is important for us, if a valid teaching or training requirement is being met. We consider this guidance to be directive.

In peacetime, the civilian health care support system is essentially a societal model based on sociopolitical and economic determinants, influenced by any number of different forces. In a period of conflict, the civilian health care support system converts to a mixed national security/societal model which tries to balance all these impacting influences to achieve the best possible results in providing essential health care to the nation.

In a wartime situation, the military health care support system converts to a purely military model based on projections of health care requirements in combat. *Requirement* is defined as "that without which the job cannot be done." The degree to which requirements are not matched by capability is a shortfall.

In peacetime, the military health care system is a mixed military/societal model based on the need to employ our contingency forces as directed by the DPPG. This health care support consists of inpatient care, preventive medicine, planning, and logistics. All four components operate at the same time, but in peacetime the most visible component is our direct inpatient care.

This peacetime military health care support system is limited by monetary constraints. The Office of Management and Budget, through its authorization and appropriations process, reviews the submissions of the Executive Branch and the Congress.

The balanced program, mandated by the DPPG, requires a specialty mix of Medical Department personnel who will also form the deployment force during a national emergency. The specific manpower requirements for that initial contingency response force should serve as the base for our training requirements. As this manpower pool is also the nucleus of contingency medical support, it generates the coercively logical and DPPG-directed requirement that all medical officers be trained in the military aspect of their medical specialty. Such training is a continuing requirement, one that will be incorporated into all our training programs and con-

TABLE II. Specialty and Numbers of Programs in Graduate Medical Education 1977-1978 Training Year

Facility	FamPrac	OB/GYN	Path	Peds	Psych	BasMed	OpMed	BasSurgery	Total
Camp Pendleton	9								9
Charleston	9								9
Jacksonville	9								9
Pensacola	8								8
Bethesda		3	3	3	4	21		13	47
Oakland		3	2	3	3	17		13	41
Portsmouth, Va.		6	2	5	4	18		13	48
San Diego		4	3	5		32	5	16	65
Total	35	16	10	16	11	88	5	55	236

tinuing education programs. So, in the event of contingency, all medical officers will have jobs for which they are prepared.

This essentially straightforward approach is often complicated by conflicting demands generated by the services, the Department of Defense, the Office of Management and Budget, and the Congress. The degree to which we accommodate these competitive imperatives will determine our effectiveness. But, remember, the way we view our own performance is by no means the way our performance is viewed by our confreres and our critics.

Our training program, then, is predicated on this basis: the number of people in training at any given time is derived from the difference between designated requirements and available assets. The specialty mix is determined by balancing the program requirement. People trained in these programs must be able to perform in contingency and noncontingency situations.

Faced with the specialty deficit we know we are going to have, and with what we know of the recruiting picture, does anyone really think the military doesn't need to train medical officers? Does anyone really doubt that cancelling graduate medical education would take us back to the 1920's? Would the American public tolerate that?

There is massive misunderstanding about graduate medical education in the U.S. Someone called me recently after reading an Institute of Medicine report that said more general surgeons were being trained in the U.S. than were needed. My caller wanted to know why, if that was true, the Navy and the other military services were training general surgeons. He had not appreciated the fact that no matter how many general surgeons are being trained not all volunteer to join the Navy. And to the degree that we require general surgeons and are not obtaining them as volunteers, we must train them.

As a result of the work done in previous SAC sessions, we have taken certain initiatives in our graduate medical education structure. The training requirements break down into four categories: we must define the requirement, compare it with present assets, identify any shortfall, and train enough people to close the gap.

Beginning in 1977 the Navy will offer 236 first-year (level 1) graduate medical education positions, in eight

TABLE III. Residencies/Fellowships in Naval Activities

Specialty	Number of positions each year
Aerospace medicine	6
Anesthesiology	18
Anesthesiology research	1
Dermatology	6
Family practice	35
Hand surgery	1
Internal medicine and subspecialties	30
Cardiovascular disease	4
Clinical immunology and allergy	1
Endocrinology and metabolism	2
Gastroenterology	3
Hematology/oncology	4
Nephrology	1
Pulmonary disease	4
Neurology	3
Nuclear medicine	3
Obstetrics and gynecology	16
Gynecologic endocrinology	1
Maternal and fetal medicine	1
Occupational medicine	1
Ophthalmology	8
Orthopedic surgery	12
Otolaryngology	8
Pathology	10
Pediatrics	16
Plastic surgery	1
Preventive medicine (general)	1
Psychiatry	11
Radiology	14
Surgery	12
Peripheral vascular surgery	1
Surgical research	1
Thoracic and cardiovascular surgery	2
Urology	6
Total	244

naval hospitals. As shown in Table II, these positions will include programs in basic medicine, basic surgery, family practice, obstetrics and gynecology, pathology, and pediatrics. The basic medicine and basic surgery years will be broadly oriented, and will include four months of surgery, four months of medicine, and electives appropriate to the trainee's anticipated clinical specialty. The family practice, Ob/Gyn, psychiatry, pathology, and pediatrics positions will conform to current guidelines for categorical programs. Trainees in basic medicine will be prepared to enter advanced training in anesthesiology, dermatology, general internal medicine, neurology, ophthalmology, and radiology. Trainees in basic surgery will be prepared to

enter advanced training in general surgery, otolaryngology, orthopedics, neurology and neurosurgery.

Implicit in this plan for Navy-sponsored postdoctoral medical education is the likelihood that most first-year trainees will serve a tour as a primary care medical officer immediately after they complete their first year of graduate medical education and before they begin further advanced training.

These modifications are essential to meet the Navy's worldwide requirements for high-quality primary health care. But the changes do not exclude physicians from advancing into available clinical programs of their choice. After a period of service in primary care, physicians will have maximum opportunity to enter specialty training.

This change in our level 1 graduate medical education program has been submitted to the Liaison Committee on Graduate Education of the American Medical Association for review. The Committee will follow our progress with interest.

The change represents an interruption in the continuum of graduate medical education. It is not a free-standing internship: there is a very real difference. We have informed all our training program chairmen of these changes, and will incorporate the changes into our specialty training programs to satisfy AMA requirements for graduate medical education programs.

Our follow-on training programs are shown in Table III. There are 35 specialty and subspecialty programs, located at all our major hospitals. We are not vulnerable to the charge that we use training programs to justify maintaining marginally productive facilities. Rather, as our workload diminished in Boston, St. Albans, and Great Lakes, for example, we quickly closed our training programs there. We are also phasing out our training programs at Naval Regional Medical Center Philadelphia.

This assault on graduate medical education is not confined to the military. There are at least two reports suggesting curtailment of civilian graduate medical training programs, and calling for a reorientation to what are perceived as national requirements. The Institute of Medicine's report on reimbursement policies for Medicare and Medicaid suggested to the Congress that all specialty training programs should be frozen at the number of positions available on 1 July 1975.

Many people high in the Government wish to make medical schools charge students enough tuition to cover all expenses. If it costs \$14,000 a year to train a medical student, then the student should be charged \$14,000 a year. The goal is to remove government subsidies from the medical schools and then to increase scholarships so the number of medical school students will not drop. From the medical school standpoint, this is an attractive administrative tool. But I believe it is a gross error in social policy. It allows the budget specialists to determine who will practice which medical disciplines, where they will practice, and how many will be allowed

to practice—all under the premise of achieving a better distribution of medical care in the U.S.

This is simply the latest attack. What the result will be, I do not know. But I think we can safely say that we are not out of the woods. We have been promised that training will be a major issue in this year's budget cycle. Training was also a major issue last year. As Admiral Cox indicated, we have taken a \$12 million cut in training in the last three years. We cannot take another \$12 million cut and remain viable.

The issue now is, How do we survive with graduate medical education? I think we are in a reasonably good position because we can relate our requirement for graduate medical education to manpower requirements. And to the degree that we can relate our manpower requirements to a contingency requirement, we can justify our graduate medical education programs.

Manpower: The Requirement Base

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The old saw that "money makes the mare go" is not altered when the *mare* is substituted for by a *tank* or an *atom bomb*. Following each war there is a tremendous resurgence of feeling against the military. This now expresses itself in various investigations, in charges hurled back and forth, in loud complaints about "caste systems," food and discipline, and even in severe criticism of the prosecution of the war, despite its success. This tumult and shouting will die; unfortunately, it probably will be replaced by tight budgetary purse strings. Names will never hurt us, but tight purse strings may choke us into professional marasmus. The argument, as far as the Medical Corps is concerned, is not whether there should be an Army, Navy or Air Force; it is not what is the effective fighting force. Our position is that as long as there is an Army, or a Navy or an Air Force, it must be composed of men and these men are entitled to the very best of care. To this end, all associations which are interested in military medicine should exert every possible effort to see that adequate funds are provided for its future development.

That quotation is taken directly out of an address by CAPT George Raines, chief of neuropsychiatry at Bethesda, at a meeting of the Association of Military Surgeons in Detroit 30 years ago! Some problems never leave us: the names and the faces change, but the old problems seem to hang around. As I read those words, I can't help but think of how appropriate they are today. There have been a lot of good people who have come and gone in those 30 years, but we seem to be stuck with the same old problems. The proposed solutions (and there have been many) have only been temporary.

Most of you are aware by now that within the past few months Dr. Robert Smith was appointed as Assist-

ant Secretary of Defense for Health Affairs. A few days after he took office I had the privilege of briefing him on the problems which beset our Navy Medical Department today. I started out by making two observations:

1) The all-volunteer force idea is *not working* for the Navy Medical Department.

2) We have, during the interbellum periods, been unable to balance the resources provided to us against the demands placed on our health care facilities.

With regard to the all-volunteer force, our real medical officer problems began when the doctor draft was abolished. With the draft we had a generous supply of general medical officers to fill many of our operational billets. Many medical officers, in order to avoid duty as a GMO with the Marines or aboard ship, volunteered for flight surgeon training and undersea and diving medicine training, so we had little difficulty filling all types of operational and non-BUMED-managed facility billets. Those are the areas where we have the greatest difficulty finding recruits today who are either interested or, if interested, qualified.

With regard to our inability to balance our resources against the demands placed on our health care facilities, the situation we face is reflected in the data in Tables I, II, and III. The total number of active-duty Navy and Marine Corps personnel in FY69 was slightly over one million (Table I). Since then it has dropped to approximately three-quarters of a million. In FY69 the number of dependents of active-duty personnel were 979,000; in FY76 there were 848,000. There were 241,000 retirees in FY69, and 337,000 in FY76. Most important, we had 651,000 dependents of retired personnel in FY69, and 906,000 in FY76. If you look at the total, there is not a lot of difference; yet we are given the same or less resources to do the job.

Table II shows what has happened to our officer strength. And remember, our Medical Department strength is based on the overall Navy strength. The total number of Navy officers in FY69 was 85,687. By FY76 that had dropped to 64,240—a decrement of approximately 25%. We had a similar drop in Medical Corps officers. Note that this is an end strength; it is not billets. It's the average on-board strength, and that's the only thing you can really compare.

Now the line thinks we are getting a break. They had to go down 25%, while we only dropped 22%. But with our reduced resources we have to take care of the same workload we had back in 1969. And the same goes for the Dental Corps, the Medical Service Corps, and the Nurse Corps. Their reductions aren't as drastic, but they are significant. The picture among our enlisted personnel is essentially the same (Table III).

CAPT Raines was right when he predicted 30 years ago that after the tumult and shouting the purse strings would be tightened. They were. It was during the era of Louis Johnson that we almost fell into professional marasmus. Korea came along and once again we were bailed out.

TABLE I. Navy Beneficiary Population

	FY69	FY76
Active-duty Navy/Marine Corps	1,071,000	727,000
Dependents of active-duty	979,000	848,000
Retired	241,000	337,000
Dependents of retired*	651,000	906,000
Total population	2,942,000	2,818,000

*Beneficiary figures for FY69 do not agree with Congressional submit. FY74 actual semiannual counts were conducted for first time. FY69 adjusted to reflect factors based on actual counts.

TABLE II. Officer Average On-Board Strength

	FY69	FY76	Change
Total Navy	85,687	64,240	-25%
Medical Corps	4,738	3,688	-22%
Dental Corps	1,901	1,775	- 7%
Medical Service Corps	1,642	1,753	+ 7%
Nurse Corps	2,408	2,542	+ 6%

TABLE III. Enlisted Average On-Board Strength

	FY69	FY76	Change
Total Navy enlisted	666,700	460,808	-31%
Hospital corpsmen	31,311	24,280	-22%
Dental technicians	4,035	3,858	- 4%

But what is happening now? In reducing the Navy Medical Department budget by \$10 million in fiscal year 1976, the House Appropriations Committee said:

For the last two years the Committee held in-depth hearings on the medical programs of the Department and made several suggestions for improved operations in the hope of reducing costs. Information obtained by the Committee this year indicates that improvements are moving very slowly. . . . While costs are increasing, military hospitals continue to be operated at less than half of the normal bed capacity. Also, the request for CHAMPUS is increased by over 10% of the original amount provided for FY 1975 and, based upon information provided the Committee, is expected to increase by over 20% before the end of FY 1976. Yet the dependents of active-duty military personnel continue to consume about 40% of CHAMPUS funds while military medical facilities remain substantially unused. The Committee has stated in prior years and again emphasizes that this does not indicate a prudent management of medical operations. Thus, it is reducing the funds requested with the objective of obtaining better management of medical funds provided. The Committee does not believe it prudent to provide large increases in funding when utilization of funded military facilities is declining.

The Committee report was dated 25 Sept 1975, and it is a matter of record! At that time we were already one-quarter through FY76. By the time the Bill was passed and BUMED and the Navy initiated action to offset reduced operations, the fiscal year was almost half over. That meant the \$10 million reduction had to be taken in the last six months of the fiscal year. Since over

\$8 million of the \$17 million increase in the BUMED budget from 1975 to 1976 was for mandatory increases (pay raises, drug abuse, etc.), this left only an \$11 million increase to absorb the Congressional reduction. This amount was barely enough to cover the high rate of inflation for medical supplies in 1976. The net result was an actual decrease in purchasing power between fiscal years 1975 and 1976, all of which had to be accomplished in the last six months.

The rationale of Congress was paradoxical—directing us to improve management by bringing CHAMPUS patients into military hospitals while at the same time providing what amounted to fewer dollars. They even helped provide the increased number of patients by extending the CHAMPUS nonavailability statement radius from 30 to 40 miles. What the Committee failed to realize in their referral to the 50% bed occupancy is that *beds* do not take care of patients, *people* do. People do, provided they are given sufficient resources.

The effect upon the Navy Medical Department was devastating. Civilian personnel dropped about 1,000 below ceiling, a loss of about 10%. All special programs were cancelled. Three million dollars was cut from the maintenance program (about 17%). Administrative services were cut to the bone, attendance at professional meetings was drastically reduced, equipment replacement was deferred, and occupational health programs were reduced. Can anyone dispute the adverse effects these actions must have on the quality of the health care delivered?

The transitional quarter budget was cut \$3 million based on the same rationale, ensuring that there would be no recovery during that period. The FY77 budget is a bare bones budget which will not allow recovery from the effects of the 1976 and transitional quarter draw-downs.

What I've just told you is a fact, and we have to learn to live with it. You've heard this before and you're going to hear it again and again: "Things are going to get worse before they get better" and "You're going to have to do more with less."

There is one ray of light in this dark picture. The law, under Title 10, U.S. Code, Chapter 55, Section 1076, paragraph C, provides that the commanding officer of health care facilities will determine whether categories of patients other than active-duty will be denied care, depending on the adequacy of the commanding officer's resources to carry out the primary mission.

Until a few weeks ago we had no precise definition of our primary mission. Now we do, and each facility has been made aware of this primary mission. Can we use this as a lever to force those in higher authority to give us added resources? Or failing that, can we force them to support us in denying health care in our facilities to the low-priority beneficiary? If we accomplish the latter, is it not ultimately self-defeating, since we will ourselves limit the proper patient mix to a point that will make clinical practice in the Navy professionally

unrewarding? I don't have answers to any of those questions. But it appears to me that whether we find answers or not, the various study groups—including the Office of Management and Budget, General Accounting Office, the Congressional investigative staff, and even our own "line"—are determined to reduce our Medical Department and find other health care systems through which care can be provided to the low-priority beneficiary.

None of the foregoing statements appear to address the topic I was assigned: "Manpower: The Requirement Base." I don't think that any of you would deny me the privilege of saying what is on my mind at this stage in my career. The fact is that with all these studies going on, I'm not sure what the requirement base will ultimately be. There is no doubt in my mind that for the immediate future our total numbers are tied to the line, and as their numbers go down, so will ours. In the final analysis, the line numbers will determine our requirement base. To that end, we are committed to redistribute our medical officer billets based on factors which take into consideration the active-duty population, the remoteness of the activity, the extent to which an activity is engaged in training, and the documented productivity of that activity. Following that redistribution, if a billet does not exist, a body will not be ordered in. That's the "no billet, no body" concept.

We have problems in the other communities but they are not nearly as critical as the Medical Corps so I will not dwell on them. The size of the Medical Corps and the size of the beneficiary population we are expected to take care of will determine the size of the other corps. It must be obvious to all of you that right now we do not have enough nurses or corpsmen to support the medical officers currently in the Navy.

There are a number of other problems that I presented to Dr. Smith, and time really doesn't permit me to review them in any detail. But I would just like to list them for you, to stimulate your minds a little.

The distribution of medical officers I've covered a little, but I didn't cover the long-range solution. Bob Strange will probably get into some of those areas.

Then there is the problem of the increased sophistication of our health care delivery system, and the problem of budgetary cuts which reflect a de-emphasis on clinical research, on the Clinical Investigation Program. You've already heard about the severe constraints on our training program.

We have some fears about our scholarship program—the same fears we had when we required people to fulfill a period of obligated service after residency training. This was considered indentured servitude and was repugnant to the physicians forced to serve out that period of time. I fear that our scholarship students may feel the same way in the future years. Only time will tell.

A tighter budget means less money for continuing medical education but I think the Surgeon General will

be able to turn that around. Recruiting is another big worry, as is the program budget decision that cancelled our physician's assistant training. That decision was made by a group of analysts who consulted us only after the fact. They tell us we can have PAs, but we can't train them.

The outcome of the OMB-DOD-HEW study is still up in the air and having a serious effect on Medical Department morale. So is another OMB study that makes unpalatable recommendations regarding variable incentive pay.

In addition to all that, we have been asked to provide medical and dental officers to the Coast Guard at a time when we can't keep our own operational billets filled.

We have not been able to resolve the corporate limit problem. If you travel from one place to another, under the law you are entitled to reimbursement for the travel. But most of you in this room have come here on your own, out of the goodness of your hearts, without reimbursement. How big can our hearts be?

There's also the problem of reduced optometry services, another program budget decision made by the analysts based on limited information, and further eroding health care benefits to the total beneficiary population.

Then there's the Uniformed Services University of Health Sciences billet problem. We were told that the billets were given to us, but they weren't. They were taken out of our hide. When we asked that the billets be restored, our request was caught up in bureaucratic red tape and has yet to be untangled. I don't know what the result will be.

We've also had to take funding decrements for the shore establishment reduction candidates. For example, the 1978 budget was based on a reduction of several facilities. But it looks as if some of those facilities may be maintained at their present capacity or at only slightly reduced capacity. Nevertheless, we have lost the resources to support them. That means we've got to take resources away from all of you to help these other places survive.

You are all familiar with the prayer: "God grant me the serenity to accept the things that I cannot change; the courage to change the things that I can; and the wisdom to know the difference." I hope we all have the wisdom to know the difference.

Medical Corps Manpower

CAPT R.E. Strange, MC, USN
Director, Medical Corps Division, BUMED Code 31

You have been hearing about the unpredictable and frequently unpleasant winds that buffet us. It reminds me of the ancient Chinese folk tale about the farmer whose horse ran away. That evening the neighbors

gathered to commiserate with him about such bad luck, but the farmer only said, "May be." The next day the horse returned, and brought with him six wild horses. The neighbors came around rejoicing about the farmer's good fortune, and the farmer again said, "May be."

The next day the farmer's son saddled one of the wild horses and tried to ride him, but he was thrown and broke his leg. That night the neighbors all came to express their sympathy on this misfortune, and the farmer said again, "May be."

But then the next day the emperor's men came to the village to seize the young man for conscription into the army, and because of his broken leg the young man was unable to go. He was excused, and the neighbors came to say how fortunately the whole affair had turned out. Of course the farmer once again said, "May be, may be."

Now, we are indeed beset with difficulties, but sometimes good things happen. It is easy to ricochet between euphoria and despair, but usually our euphoria turns out to be unwarranted, and the despair unfounded. The only tenable and practical attitude I have been able to develop is what we might call "optimistic skepticism," or if you prefer, "skeptical optimism"—withholding judgment and emotionalism. In other words, saying "May be, may be."

Table I shows Medical Corps strength, losses, and gains in recent years. The 37% gain in 1972 is misleading. That was a year when a lot of people who had been deferred through the Berry Plan came in. Except for this red herring our gains stayed about the same while our losses generally increased. In FY75, our loss rate dropped to 30% and we had a 30% gain to balance it for the first time in years. In FY76 we had a 27% loss rate balanced by a 27% gain. This type of balance began in FY75—the year variable incentive pay went into effect.

Table II shows where Navy physicians are coming from. As everyone knows, the Berry Plan is precipitously declining. The startling numbers are for volunteers: we will need 335 Medical Corps volunteers in FY77 to maintain our strength, and there is just no way we are going to get that many. The most we have been able to recruit in one fiscal year is around 180. Consequently, we are going to have some shortfalls. If we recruit 200 medical officers in each of the next fiscal years—and since 180 has been our best result so far, that is an optimistic estimate—we will still be short 135 physicians at the end of this fiscal year and short 272 physicians at the end of FY78.

Table III shows what has happened to the community in which our employers—the line—are most interested. Nobody in the line ever asks for a heart surgeon or a child psychiatrist: the line wants general medical officers, flight surgeons, submarine medical officers—and you can see what has happened to those groups. In FY73 our total strength was 4,345 medical officers, with 1,752 physicians in the group which includes GMOs,

TABLE I. Medical Corps Strength/Losses/Gains

Fiscal Year	Begin Strength	Losses	%	Gains	%
FY71	4524	1436	32	1165	26
FY72	4253	1381	32	1578	37*
FY73	4450	1539	35	1044	23
FY74	3955	1552	39	1000	25
FY75	3403	1015	30	1043	30
FY76	3431	930	27	929	27

*Large number of accessions from Berry Plan who entered program at height of Vietnam conflict (1967-68).

TABLE II. Medical Corps Accessions

Fiscal Year	End Strength	Scholarship Programs	Berry Plan	Volunteer*
FY75	3431	231	518	159
FY76	3447	238	416	171
FY-TQ	3771	0	235	180
FY77	3640	209	129	335
FY78	3613	181	32	337

*Needed to maintain end strength

TABLE III. General Medical Officers, Flight Surgeons, and Submarine Medical Officers

Community	FY73	FY74	FY75	FY76	Decrease
Total 2100 community	4345	3971	3836	3848	11.4%
GMO*	1752	1125	708	657	62.5%
GMO/Total Medical Corps ratio	40%	28%	18%	17%	

*General medical officers + flight surgeons + submarine medical officers

flight surgeons and submarine medical officers. Operational people and general medical officers made up 40% of the Medical Corps. This past fiscal year our strength fell to 3,848 physicians, with only 657, or 17% of the Corps, in this group. Overall, the number of Navy physicians has declined 11.4% since FY73, but the decrease in the operational medicine and GMO communities has been about 63%. That's one of our major problems.

Where are our physicians assigned? Table IV shows the distribution of medical officers other than flight surgeons. Of the billets belonging to the Commandant of the Marine Corps, only 41% are filled—and that's not including flight surgeons.

Last March about 92% of CINCLANTFLT billets were filled, and about 90% of CINCPACFLT billets. The total percent of operational billets filled as of last March was about 76%, again not counting flight surgeons. And remember that those billets belong to the line, not to the Bureau of Medicine and Surgery.

Authorized billets for the Chief, BUMED at that time (not including flight surgeons) were about 2,700, and were 116% filled. The difference between 116% and 76% is thrown up to us every time we meet with line commanders. It's a problem with which we struggle continuously. We know *why* we have more doctors in our hospital facilities than we have with the fleet, but we can't excuse it. We are trying to correct it.

Table V shows the distribution of flight surgeons, who are one of our hottest commodities with the line. As of last March only 43% of the Marine Corps flight surgeon billets were filled, while CINCLANTFLT had 72% filled, and CINCPACFLT had 71%. In all, only

TABLE IV. Medical Officer Manning, Less Flight Surgeons 31 March 1976

Claimant	Authorized	On-Board	Difference	% of On-Board to Authorized
CMC	161	66	-95	40.99%
CINCLANTFLT	82	75	-7	91.46%
CINCPACFLT	80	79	-1	93.75%
Other	70	78	+8	111.42%
Subtotal	393	298	-95	75.82%
COA*	265	29	-236	10.94%
CH BUMED	2665	3100	+435	116.32%
Unassigned	0	73	+73	0
Total	3323	3500	+177	105.32%

*Central Operating Account (includes transients, prisoners, etc.)

TABLE V. Flight Surgeon Manning, 31 March 1976

Claimant	Authorized	On-Board	Difference	% of On-Board to Authorized
CMC	61	26	-35	42.62%
CINCLANTFLT	44	32	-12	72.72%
CINCPACFLT	52	37	-15	71.15%
Other	27	18	-9	66.66%
Subtotal	184	113	-71	61.41%
COA*	21	0	-21	0
CH BUMED	151	80	-71	52.98%
Unassigned	0	0	0	0
Total	356	193	-163	54.21%

*Central Operating Account (includes transients, prisoners, etc.)

61% of our flight surgeon billets were filled. Obviously, fewer flight surgeons were assigned to BUMED activities.

The total situation—flight surgeons, operational medical officers, and physicians at BUMED activities—is shown in Table VI. Our operational billets are about 71% filled; our BUMED billets are about 113% filled. The two biggest areas where we desperately need people to keep our bosses happy are aviation medicine and Fleet Marine Force.

From these data it is easy to see that our primary problem is maintaining a sufficiently large number of physicians. We have a problem in simply having

TABLE VI. Total Medical Officer Manning
31 March 1976

Claimant	Authorized	On-Board	Difference	% of On-Board to Authorized
CMC	222	92	-130	41.44%
CINCLANTFLT	126	107	- 19	84.92%
CINCPACFLT	132	116	- 16	87.87%
Other	97	96	- 1	98.96%
Subtotal	577	411	-166	71.23%
COA*	286	29	-257	10.13%
CH BUMED	2816	3180	364	112.92%
Unassigned	0	73	73	0
Total	3679	3693	+ 14	100.38%

*Central Operating Account (includes transients, prisoners, etc.)

enough medical officers, even before we even get into the problem of the right mix of medical officers.

We also have a problem determining our real requirements—who and what is required to accomplish our mission. Our requests must be based upon contingency planning, and that's not easy. We have to determine how our physicians will be distributed. RADM Rupnik talked about the study under way in this area. We have come up with a preliminary formula, the first part of which considers the active-duty population, because the reason for our existence is to care for active-duty personnel. By allowing one medical officer for every 1,000 active-duty personnel (a traditional ratio whose origin is lost in the mists of antiquity), we have the first cut in the distribution of medical officers. Everywhere there are 1,000 active-duty personnel, we will place one medical officer.

After that, we figure workload. Obviously, the more work people are doing the more doctors they should have: it is a built-in incentive system.

Other considerations—training programs, isolated duty stations, and so forth—then come into play. After all this is done and we decide how many physicians should be located in each place, we then reassign the billets and eventually get bodies and billets lined up. Right now we have places where there are no billets and many bodies, and places where there are no bodies and many billets. We have to resolve this.

Achieving the proper mix of medical officers is even more confusing. We have tried to categorize our facilities as to which are or should be primary care, secondary care, or tertiary care facilities. We define primary care as care given at the point of access into the health care system; it includes primary care specialties. Secondary care comprises other basic specialty care, and tertiary care features the subspecialties.

Our big problem, of course, is in primary care—the access point into the health care delivery system. If we include the usual designations of primary care specialists, plus a few general physicians, we have about 33% of our Medical Corps engaged in some sort

of primary care activity. The American Medical Association says, and our studies also indicate, that we should have about 50% of our Corps in primary care specialties. So there has to be some overall realignment.

As I said earlier, we have big problems with operational medicine. We've made advances here by pooling physicians, by trying to redesignate some Marine Corps billets so the physicians can work in medical centers, and by using scholarship graduates for operational duty. By these methods, we hope eventually to solve the problem of providing the primary operational care that our bosses are demanding of us, and that we should be delivering.

There are also several personnel issues—variable incentive pay, promotions and service obligation, for example—which affect our ability to recruit and retain physicians.

Variable incentive pay has been extended by law until October 1977, and we assume it will continue beyond that date. There are many studies under way to study variable incentive pay and the whole problem of pay for federal physicians, and there are many ideas about it. Some people think all federal physicians should get the same amount of money, others think physicians in administrative jobs should be paid very little while those who are seeing patients should receive a lot.

This year we have had a major problem with obligated service for senior medical students, all because we decided to be consistent. That seems like a noble goal, but the morass we entered was amazing: obligated service is a quagmire of assorted instructions, contracts, promises, and opinions. The Department of Defense has prepared a new obligated service instruction which should clarify a lot of misunderstanding. A simpler, more direct, and clearer directive about service obligations will be very helpful.

One of the things which has concerned us most this year has been a massive change in promotion policies. The change was initiated by a new Department of Defense instruction which, to summarize, changes promotion opportunity to O-5 and O-6. In the past, each medical officer had a 90% chance of being picked for commander and captain, but this has now been changed to 80% for commander and 75% for captain. Along with the decrease in opportunity, there will be some slowing of promotions. These are big changes and, unfortunately, a lot of people will be disappointed.

There's one good thing about the change: A physician now has to be on active duty for over a year before he or she can be considered by the selection board. That is a positive change.

Another change is that we can no longer recruit physicians at a grade above lieutenant commander. That has been our policy for the last year, but now it is law. If someone has 20 or 25 years of practice, he will still come in as a lieutenant commander. That could be

good, or it could be bad. As the Chinese farmer said, "May be, may be." We will have to wait and see what the effect is.

What are the most significant overall trends and issues in the Medical Corps at this time? One is the requirement that training programs be based on contingency needs. This is called "contingency-based requirement planning," and you will be hearing more and more about it in the months ahead.

Another is the absolute necessity to eradicate the fleet/hospital polarity which has plagued us for years. The Surgeon General feels strongly about eliminating this dichotomy and achieving one Navy Medical Department.

Finally, we must develop a new Navy medical officer. In the Medical Corps of the future, medical officer career patterns will involve continuous interweaving of clinical care ashore and clinical care afloat, operational medicine and medical center duty. It must be that way. Careers may differ quantitatively in the relative amounts of each type of duty, but they must not differ qualitatively by assignment to one type of duty at the exclusion of all others.

We need "ambidextrous" medical officers—people who can use both hands; people who, in fact, may be given two assignments simultaneously. They may be working in a hospital ashore, but will have an accompanying assignment to operational units. That is my personal belief, but I feel that sooner or later it must come to this or we will not be able to justify the existence of a Navy Medical Corps.

None of our problems is new. Variable incentive pay, for example, has been around for much longer than most of us realize. I recently found a splendid little paper in the *Naval Institute Proceedings* from September 1929, written by a Commander Mann, a Navy physician. He pointed out that the Roman Navy had great difficulty obtaining physicians and so they resorted to double pay and emoluments. On inscriptions about the Roman fleets, the names of ship surgeons were always followed by the word "duplicarius," indicating their status of double pay.

The original pay amounted to 450 denarii, which was soon increased to 600 denarii. And after the reign of Septimus Severus, the paychecks were increased to 1,000 denarii in order to get physicians to go to sea. They also had specialists at sea: Galen reports, in fact, that when the Roman fleet deployed to Britain they had eye specialists aboard.

The Republic of Venice in the 14th century had a big Navy, and physicians on all their galleys. Reports show that a man called Valparius, a Venetian Navy physician around 1320, was given an allowance for quarters and professional supplies, and permitted to draw three years' pay in advance, in addition to his salary. He was also granted a considerable sum of money as a dowry to marry off one of his nieces. We have not reached that point yet, but it may be coming.

Operational Medicine Support: Another Look

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One of the major issues in military medicine today is the question of operational medicine. What is it? How does it differ from non-operational medicine? What are its unique properties? How do we train physicians in its mysteries? What service does it provide our Navy and our country?

We understand that a group has recently undertaken to define operational medicine, develop and sell the postgraduate educational program for the specialty, and recruit candidates. Some of us believe these efforts have been poorly thought out, ineffectively tested, awkwardly articulated and emotionally defended. We, therefore, propose to challenge the philosophical basis of operational medicine education and practice. We hope that, by so doing, vanity might be replaced by an honest debate and an exchange of ideas about the real operational world.

Of some importance is the definition—a definition based on preventive versus curative medicine, clinical versus sea or battlefield medicine. Operational medicine is and must be the direct support of military operations to reduce morbidity and mortality of our fighting forces, and to assure the functional efficiency of those forces. This definition must be applicable in wartime and peacetime, and must be appropriate to traditional and advanced technologic weaponry.

In support of traditional military operations, operational medicine includes the problems of amphibious medicine, battlefield medicine, tropical medicine, cold weather medicine, mountain military operations, sea immersion, sea survival and casualty evaluation systems, design and operation of advanced technology, and man-machine adaptation. It includes aviation medicine, submarine medicine, diving medicine, ecology, hyperbaric physiology, and the biomedical problems of surface effect vehicles.

It is important to view the chronology of some of the issues eventuating in our current reassessment of operational medicine training and practice. Fleet demand for greater evidence of operational support is not a new revelation for this group. Neither is the burgeoning disparity between our postgraduate training programs and the direct delivery of health care to fleet commanders. Fashions in medical education over the past decade have insisted on continuing education from medical school through board certification, and greater

degrees of subspecialty sophistication before a physician is considered completely trained. Also, during our professional lifetime many traditional medical problems have been solved. Nutrition, for example, can now be handled by the dietitian, and does not require the close attention of the physician. So, too, many biomedical problems of man-machine adaptation have been solved by substituting technological advances for physician-directed biomedical monitoring. Witness, for example, the impact of pressurized aircraft on aviation, the elimination of carbon dioxide narcosis by the CO₂ scrubber, and the steady decrease in air embolism decompression sickness.

Above all, our reassessment of operational medicine is required by the identification of biomedical problems associated with new strategic, tactical and technological approaches and developments. It is neither appropriate nor feasible to offer a complete inventory, but a few examples might include:

- Alterations in biorhythms associated with rapid movement through time zones.
- Tissue injury related to laser and microwave radiation.
- Adaptation or resistance to psychological stress.
- Thought control.
- Undifferentiated fatigue, boredom and sleeplessness.
- The effects of environmental toxicity.
- Rapid evacuation.
- Medical in-service management, such as open heart surgery, renal dialysis, and tissue transplantation.

In examining the effectiveness with which traditional operational medicine reduces morbidity and mortality and enhances fleet readiness, we must consider the measurable contributions of the flight surgeon and the submarine and diving medical officer, particularly in special examinations and treatments, biomedical research, and fleet liaison. Many elements of operational support are common to aviation, submarine, and diving medicine; these elements include physical examination for special duty, accident investigation, and participation in the administrative and operational readiness inspection. There is a diminishing need for special examinations and treatment provided on a recurring basis in all operational medical areas. This reduction is due, in large measure, to standardization of procedures, allowing them to be carried out by technicians with only minimum medical training.

The actual and potential impact of the operational medicine specialties on morbidity and mortality of active-duty personnel is diminishing, and is not nearly as effective as continuing advances in human engineering design. Medical officer opinion is still required, however, in biomedical research of operational relevance, in fleet liaison, and to set physical examination standards. An individual cross-trained in the technologies of operational medical support can fulfill requirements as well as or better than we are doing now.

A central feature of our argument is the essential interface between clinical and operational medicine. We believe that separatism, remoteness, and antagonism and misunderstanding between these groups should be discouraged. It amazes and alarms us that such a position is not obvious—that it must be identified and defended, if such is the case.

There are many examples of applicable operational medicine models, and fundamental questions in the physiology of medicine that need answering. Hypoxia, for example, is a critical problem for the high altitude flight crew in a disabled oxygen system, or in a submarine that has lost its oxygen regenerating capacity, or for the diver who has outdistanced his gas supply. But hypoxia is also a critical issue for the patient with extensive chronic obstructive lung disease, or the surgical patient receiving general anesthesia, or the fetus during a complicated labor and delivery. The understanding of hypoxia gained by the clinician, the flight surgeon or the diving medical officer is clearly applicable to other areas.

A similar argument could be drawn for studying man's adjustment to hypercarbia. Closed-space environments are subject to this biomedical hazard, as is the individual with respiratory failure. Adjustments to noxious stimulants are complicated. Their understanding demands a detailed knowledge of the lungs, kidney, pituitary-adrenal axis, calcium, metabolism, water and electrolyte balance, body pH, and cardiovascular function. The exposure of active-duty personnel to hypercarbia must be dealt with eruditely by physician and attendants on the rescue vessel as well as in the intensive care unit. Exposing a physician to hypercarbia in either of these environments will better prepare him to carry out all his military and medical responsibilities. This opportunity to observe applied physiology in clinical environments as well as environments unique to military operations is one of the real attractions of a military medical career.

So we see an alternative to the future training and deployment of flight surgeons and fleet medical officers. We propose that clinicians cross-train in the technology of all military medical environments. The career patterns of individuals so trained would allow them to take either of two paths: one choice would be alternating assignments between fleet and clinical billets; the second choice is to alternate assignments to our biomedical research laboratories with fleet and commander-type assignments. We believe this flexible career pattern will be more attractive to fledgling physicians considering a career in the military, especially in operational medicine.

We predict some difficulty gaining acceptance of this concept by fleet commanders in the aviation, submarine, and diving communities. They have become accustomed to having their own flight surgeons, their summary medical officer, in short, their own doctor. With this change physicians will no longer wear wings

or dolphins. Furthermore, if there are irreconcilable differences of opinion within the Medical Department, selling such a proposition to our nonphysician shipmates and line commanders may be impossible. Our task, then, is to agree on the most effective way to train and deploy scarce medical talent, and to convince the line commanders and the aviation and submarine communities of the benefits of the new approach.

We believe that this approach—with its potential for breaking down barriers between operational medicine and clinical medicine—will benefit the naval medical officer who does not identify with operational medicine. Early cross-training in operational and clinical disciplines and subsequent alternate assignments between operational and clinical billets will better mix and stimulate all naval medical officers, whether they are operationally or clinically oriented.

In our Navy Medical Department organization, this change should mean the disestablishment of separate submarine and aviation medicine organizational entities within the codes of operational medical support. One suggestion is that realignment within the code will emphasize biomedical research requirements, setting of physical standards, accident investigation, billeting, and fleet liaison. In naval regional medical centers, the change should mean that operational medicine branches will be established within the departments of internal medicine and general surgery. These new branches should be charged with an operational medical role, such as training and use of hypobaric and hyperbaric chambers within the region, evaluation of new technologies in wound management, casualty evacuation, and support of large fleet exercises, to include involvement in regional tertiary care centers.

We recognize the need for a small cadre of Navy physicians to orientate their careers toward deep involvement in operational medicine. We believe this need can best be met, however, by giving this select group alternative training tracks rather than by demanding their premature and sometimes unwise early commitment to a single option. Remember that morbidity and mortality during war is more related to infectious disease management, dermatological management, psychiatric management and wound management than to decompression sickness, oxygen convulsion, or the minor neurosis of a still maturing aviator. Management of contagion, the skin, the psyche, and wounds is central to effective, comprehensive operational medicine. This should be reflected in operational medicine training programs.

We propose three possible tracks for a physician desiring a career in operational medicine:

- Preventive medicine/occupational medicine track.
- Internal medicine/family practice track.
- Surgery/surgical subspecialty track.

In each training program the proposed G-1 year is the traditional basic medical, basic surgical program. The second year should provide exposure to aviation medi-

cine, submarine medicine, and other operational technology, using facilities close to the naval regional medical center that provided G-1 training. The G-2 year should be under the control of the operational medical branch, with students assigned to either the department of medicine or department of surgery. The next three years of training, depending on the selected track, should complete requirements for board eligibility in preventive medicine, occupational medicine, internal medicine, family practice, or surgery. The sixth and seventh year should be a period of operational deployment, to be followed by additional postgraduate training if desired. The goals of such a training program are:

- Career retention of operationally oriented medical officers.
- Development of physicians trained in the medical support of fleet operations.
- Development of a highly respected cadre of Medical Department personnel who function as advisers on fleet operational matters.

We believe that more is at stake than simply the form and substance of operational medicine. Our military medical establishment is a unique global laboratory for studying applied physiology. Used properly, it can provide answers of fundamental biological relevance to the relief of human misery. It can give our military medicine profession a position of leadership among the world's medical centers. It can clearly, unequivocally and eloquently complement the justification for naval medicine's continued involvement in postgraduate medical education. Further, it can complement the justification for naval medicine's continued involvement in clinical research, and can strengthen the argument for truly reciprocal affiliations with local university medical centers.

Not to seize these opportunities and these challenges will surely lead to our assimilation or destruction as an organizational entity. Our uniqueness, our single rationale is our ability to understand and mold the military environment to ensure the health and welfare of our fighting forces. To this end, we offer the following conclusions and recommendations:

- Current training programs and career development policies are not adequate to meet all fleet operational needs and to provide satisfying professional careers.
- Current attitudes separating operational medicine from clinical medicine are divisive and counterproductive in meeting operational needs and individual career objectives.
- Military applied physiology has rich potential for providing a variety of biomedical models applicable to clinical medicine.
- Postgraduate development of clinical skills, knowledge and attitudes is an appropriate alternate background for the operationally oriented medical officer of the future.
- Graduate education in applied physical research in

the fleet operational environments can improve our professional image.

- Current approaches to training in aviation, submarine, and diving medicine should be restructured.
- Postgraduate training programs should be restudied with the intent of including additional clinical training and alternatives in internal medicine, family practice, and general surgery.
- The Bureau of Medicine and Surgery should be reorganized to eliminate the hiatus between operational and clinical medicine.

Continuing Medical Education: An Expanding Requirement

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Let's start with a definition. The Association of American Medical Colleges, whose task force in continuing medical education has recently reported out, says that continuing medical education is "all activities that result in the maintenance and/or enhancement of the physician's professional knowledge, attitudes and skills." Practically speaking, this means that continuing medical education begins when graduate medical education programs end, and that it continues throughout our professional lives. This definition, obviously broad, deliberately excludes learning that takes place during any formal graduate medical education programs.

Why do we have continuing medical education? Well, I think it's fairly obvious that it exists to improve the quality of medical care provided by the health care team. Furthermore, continuing medical education is part of the movement toward increasing accountability in medicine. Beyond these sweeping generalizations, however, there exists a morass of unanswered questions which justify our seeking your guidance.

Currently under review at the Bureau of Medicine and Surgery is BUMED Instruction 4651.1A—the Bureau's attempt to create an equitable funding policy for continuing medical education. The purpose in issuing this instruction is to identify continuing medical education as a need unto itself, and to isolate it from the more general categories of short courses, conferences, and so forth.

The instruction also has secondary aims: to identify the Naval Health Sciences Education and Training Command (HSETC) as the "financial parent" of people assigned to non-BUMED-command activities; and to assign to commanding officers of regional medical centers primary responsibility for the ongoing education of Medical Department personnel within their regions.

Other reasons for issuing the instruction are to eliminate inconsistencies among our five corps by establishing guidelines for screening training requests, and to make the best use of our resources. For example, transcontinental travel and attendance at meetings unrelated to present duties is clearly discouraged in this instruction.

These policies have already been adopted by the corps program directors at HSETC. When HSETC approves a request, an entry is made in the individual's training record, which is permanently available for review. However, presently continuing medical education programs funded by regional medical centers are not forwarded for entry into any centralized training record.

Let's divert our attention from the Navy and look at what the civilian community is facing, since their situation is not dissimilar to ours. They are acutely aware that a variety of factors are at play. For example, there is nonspecific pressure from consumer groups, such as groups involved in pre-paid health maintenance organizations. There are several state and national political influences. As just one example, proof of continuing medical education is required for relicensure in several states. Also, certain members of Congress are continually advocating the reexamination and federal licensure of all physicians and would link this requirement to documented continuing medical education. Furthermore, many PSRO (Professional Standards Review Organization) groups are leaning toward target-oriented continuing medical education to compensate for what they feel are deficiencies.

There is the obvious twofold impact of the malpractice crisis: one result is that continuing medical education is now required by several state malpractice laws; another is that malpractice suits may make some physicians aware of their own need for continuing education.

Another fact that underlines the concept we are discussing is the growth of biomedical knowledge. It is impossible for any physician to stay current in his or her field without devoting specific time for continuing medical education.

Last but not least among the civilian pressures are voluntary and involuntary sources of guidance. An example of voluntary guidance is the AMA physician recognition award program. On the involuntary side, 12 state medical societies and six medical specialty societies require proof of continuing medical education, even for membership. The Joint Commission on Accreditation of Hospitals also clearly exerts its influence in this area. We may be assured that the developing role of the liaison committee for continuing education, together with pending legislation, will further underscore the relevance of continuing medical education for the Navy community.

There remains a host of internal problems which compound the wide variation in personal motivation necessary for any voluntary continuing medical education.

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tion program to succeed. These problems include:

- Poor understanding throughout the medical community of exactly why continuing medical education is needed.
- Episodic and often misdirected means for meeting the need for continuing medical education.
- Little coordination among several interested groups, all trying independently to accomplish their goals.
- Lack of effective audit of the usefulness of any specific continuing medical education effort.
- Limited availability of continuing medical education to certain subpopulations of the health care team.
- Limited research to solve these problems.
- Few incentives for pursuing continuing medical education. Often there is a rather vague coercion which can breed more resentment than cooperation.

To determine where we are headed, we must answer a number of questions: Are there any unique Navy needs that cannot realistically be met by periodic participation in general medical training as it is presently being designed? Should we wait for present or future pressures to crystallize, or should we develop our own interim requirement and systems? If federal licensure occurs, should military physicians be included? Should we adopt a mandatory requirement for our own communities? If so, should we link this requirement to credentialing or promotion?

If we establish those requirements, should the Navy or the individual assume the cost? Should separate funding be established throughout the Navy? And should those funds, as well as recordkeeping responsibilities be centralized? Or do we maintain the present duality between the regional medical centers and HSETC? Should an audit system be developed? Should it differ among the various subspecialty groups? Should we develop a network of continuing medical education programs within each region as an integrated component of the regionalization concept?

These are just samples of the questions that need to be addressed if we are to fulfill our management obligations of planning and preparedness.



CAPT H.O. DeFries (MC) questions SAC 8 panel members

PANEL DISCUSSION

RADM J.W. Cox, MC, USN
 RADM R. Laning, MC, USN
 RADM E.J. Rupnik, MC, USN
 CAPT J.S. Cassells, MC, USN (moderator)
 CAPT J.J. Quinn, MC, USN
 CAPT R.E. Strange, MC, USN
 CDR B.G. McAlary, MC, USN

Q. Regarding continuing education: Just exactly what kind of continuing education guidelines are we now using at the Naval Health Sciences Education and Training Command (HSETC) pending the new instruction? What are the continuing medical education resources like for this current fiscal year?

CDR McAlary: First of all, total resources for fiscal year 1977 have not been determined. I do not know at this point what funds will be available under the broad category of continuing education, but I have every reason to believe that it will be less than we want.

Our present funding guidelines are designed to give fewer resources to more people. Each of you will be getting replies from HSETC that will reflect these guidelines. In between the politely worded *no's* will be remarks such as, "Don't plan to go from one coast to another: we can no longer afford that kind of travel."

We must also keep the cost per person well below \$500, if possible. If we can do that, we can probably provide resources for all of our operational medicine community. Interestingly enough, those people seek resources with less enthusiasm than do people at BUMED-commanded activities. I think this is largely a fault of the system: the operational medicine community perhaps doesn't realize that these resources exist; or they have been so discouraged in the past when seeking resources, that they think it's useless to ask.

Q. How will limitations on PCS (permanent change of station) funding impact on the policy of a year in operational medicine following graduate training year one?

CAPT Cassells: This problem came up after our original decision. There is an impact here that must be evaluated very carefully.

The initial problem—and I think the lesser problem—will be to get the students out to the field in the first place. But if these constraints persist and we can't adjust the projected rotation dates (PRDs), we may have trouble putting our interns into operational assignments. Their PRDs now are one year, so they could continue without creating a problem for the computer system at the Bureau of Naval Personnel. That's what I'm concerned about.

Q. CAPT Quinn, where does operational medicine fit in the Occupational Health Service? How might it affect our preventive medicine programs if people who are trained to work in an industrial setting are required to serve one year in operational medicine?

CAPT Quinn: Well, one of our problems is that we don't have enough occupational medical officers who are trained operationally. They don't bounce back into clinical medicine, and we don't have the interplay between, say, internal medicine and occupational medicine or preventive medicine that we would like to have.

The kind of program we would probably want would involve putting students through a basic medical year program, through a master of public health degree, whether it be preventive medicine or occupational medicine, and then assigning them dual duties in a Navy shipyard.

Q. CAPT Quinn, would you comment on the idea some people have that operational medicine is not stimulating medical practice? I've heard the complaint that there isn't a real contingency need, and also that people don't like operational medicine because it means spending a lot of time away from home. Wouldn't it be better to have a broader-base physician population to draw upon, and have our specialists partially trained in operational medicine so that they could share the load? And wouldn't it enhance the esprit de corps of the Navy Medical Corps by bringing us into one family instead of two separate groups: operational and clinical?

CAPT Quinn: This is what we are trying to do. By giving our operational medicine people a broad base—in internal medicine or family practice or surgery, for example—we would enable them to alternate between clinical medicine and operational medicine. Right now when you get into operational medicine you tend to be stuck there unless you have the credentials to get back into the clinical medical specialties. Once some of our people get into operational medicine, they stay there—and I think that's to the detriment of all of us.

There are many clinicians who don't like to go to sea, and there are many clinicians who don't like operational medicine. But I think from now on everybody is going to have to like operational medicine.

Q. Are you talking about only a small group of individuals? Or about half the Medical Corps participating?

CAPT Quinn: I don't think you would ever get half the Corps to participate. As Bob Strange pointed out, we need 50% of our people in primary care, and of that 50% I would suspect that 15% or 20% would probably be in operational medicine. But I'm just guessing at those figures.

You will never get an ideal situation. I think you'll always have to have a small group of people who enjoy the biomedical aspects of operational medicine and who enjoy going to sea. But you have to give them an opportunity to come back into the clinical field. Because right now the people in clinical medicine often don't understand the operational side, and sometimes vice versa. But I don't think you could ever make everybody go to sea.

Q. What is the general opinion of the Navy physician among the line? Do line commanding officers still want "my doctor," or are they accepting new programs of health care delivery?

CAPT Strange: The answer to that is yes in some ways, and no in others. What they would like us to be and what we are frequently differ. The line, beyond a shadow of a doubt, still wants their own physicians; they still want a ship's medical officer.

But I think we can get modern medicine in the Navy accepted by all. I'm fairly optimistic that eventually we will be able to change these concepts. I also think, however, that people who are primarily interested in machinery and events will maintain certain attitudes about physicians that we will have to adapt to. It has to be a 50-50 proposition.

RADM Rupnik: There are line officers of the World War II

vintage who tend to be the "my doctor" types. But I think that in the past few years, since we introduced the pool concept, we have convinced the younger line officer that he doesn't have to have his own medical officer. Unfortunately, the younger line officer is not in a position of authority to turn this whole thing around.

But eventually it will be turned around, so that the line will not think of us as "their" medical officers but will rely on the medical centers to provide care they need when they deploy. Right now there are still those who will have it no other way: they want the operational billets filled with their own doctors.

RADM Laning: You're absolutely right. But there's another thing: as a line officer progresses in his career he develops an attitude of command. So the young line officer who today may be sympathetic with our problem, in the future—as he develops a command attitude himself—may change and become the traditional line officer.

RADM Rupnik: That may be true. But there's also a chance that if a young line officer is not accustomed to having his doctor aboard the ship, he is not going to expect us to provide medical officers to his own younger line officers when he gets into command.

Q. If our graduate training programs are reduced, do you think we would also modify our health care delivery system? Would we reduce our patient population? Or would we be asked to do more with less?

RADM Rupnik: Well, I don't know how accurate my predictions are but as I look into the future I see a smaller Navy Medical Department. And I am talking about all corps. I say that because it appears our total military population is on the decline. Now obviously if our total military population builds up again, we will have a larger Medical Department. The results of all the studies that I've seen convince me that we are viewed as a commodity that is too expensive. The studies suggest that the Navy can only afford the number of physicians needed to respond to a contingency. And to the extent that number of physicians can take care of other patient categories when we aren't fighting a war, then that's how many patients we'll have.

A tremendous number of assumptions are made when you get into contingency planning. And the decisions depend on what the assumptions are in the first place.

So as I see it, there has got to be a smaller Medical Department with heavier reliance on other health care systems outside the military. The only other solution would be to have Congress change the law to give us enough resources to take care of the beneficiary categories that we expect will come to our door. We don't have that right now. Not with a \$10 million cut in FY76, and a \$3 million cut in the transitional quarter.

Q. CAPT Strange, as I recall you showed that a sizable percent of our hospital-based physicians is serving the fleet through the fleet medical pool. Is the problem that this information is still not favorably received by the senior line officers who are not out with the fleet themselves and who do not see our hospitals as providing fleet support?

CAPT Strange: Yes. We take it on the chin all the time, because our regional medical centers really are furnishing support. The problem is that the line officers see only how many operational billets are filled. We attempt to get our point of view across—to show that hospital-based physicians support the fleet, too.

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SAC 8 panel: (left to right) CDR McAlary, CAPT Quinn, CAPT Strange, RADM Rupnik, RADM Cox

The greatest danger to the pool, frankly, is the computer readout and the way it distorts the amount of support we are providing. We try to educate the line, but it's partly a control issue and partly the product of the age of computers.

The control issue can't be forgotten. I think that, even if there were a medical officer on every ship and in every Marine billet, if the billets did not belong to the line commander he would be dissatisfied because he feels he has to have control of his resources.

So we keep pushing the pool concept, "FAC" (functional area coding) coding the billets, and try to get the point of view across that the regional medical centers are supporting the line.

RADM Rupnik: We fought this battle about a year ago when VADM Watkins took over as Chief of Naval Personnel and wanted all operational billets filled by the end of the year. It became apparent that the real problem was a computer foul-up, that the fleet was getting the medical care that it needed.

As Bob pointed out, they want to be able to say "That doctor is my doctor. He belongs to me. That billet is filled." The only way I know of to do that is through FAC coding. This is a technique to identify an individual assigned to an operational billet but who, under certain factored conditions, would work in another area. In other words, we could have Marine billets 100% filled, but say 60% would be FAC coded billets, so those physicians could be assigned to various regional medical centers or other facilities when not needed by the Marines. But they would be "controlled" by the commanding officer of the unit to which they were assigned. Whenever their unit was deployed or had a training exercise, they would go out with that unit. The physician "belongs" to the unit, but under all other circumstances he would usually work in a regional medical center.

We should have all the billets in the Marine Corps filled by the end of this year. The one big hitch is who is going to pay the TAD (temporary additional duty) costs when you transfer a man from one unit to another. That has not been resolved.

There recently was a Naval Audit Service study done at Port Hueneme in which they suggest the same technique for the fleet billets. We are in complete agreement. We think that fleet billets ought to be filled the same way. They ought to be "FAC" coded billets. Bob Strange's chart showed hospital billets 112% filled. If those 12% were actually assigned aboard a ship, our chart would not show 112%. It would show hospital billets 100% and fleet billets 100%, and the fleet wouldn't have a basis for their argument that their billets are not being filled.

CAPT Strange: Whether we like it or not, we are heading for the point where hospitals will be staffed by many medical

officers assigned to the regional medical center on an *ADDU* basis, and whose primary duty is with the fleet. That's what is coming, and it's probably the best way to solve the problem. It's either that or very few medical officers for your departments.

RADM Rupnik: Right now, under the pool concept, you are given a three-month assignment aboard ship and then you are brought back and then another physician takes your place and is out for three months. This might increase to six months, and might be extended for a month before the deployment and two weeks after the deployment. So we are talking about some deployments being seven months. If you tack a month and a half onto that, we are talking about a nine-month deployment. If you or the members of your staff were given the choice between that kind of deployment and a full deployment at sea, would it make much of a difference to you?

Participant: I know of no ship that's deployed for eight months. The ship is going to be back in port during that period of time.

RADM Rupnik: No, I know of some ships that are out seven months, and what we are talking about is tacking a month and a half onto that, so you are away from your regional medical center for 8½ months.

I believe that the medical officer who would object to a year's assignment to a ship would have the same objections if he were assigned to that ship for 8½ months. Do you agree?

Participant: It depends on the billet. It becomes discriminatory because the only people who are going to be eligible for this program are those who have multiple billets in the hospital. You are not going to send your gastroenterologist out for eight months or a year if he is occupying the only billet at the hospital for gastroenterology. You'll send the general internist or the general surgeon. And therefore the program becomes discriminatory.

RADM Rupnik: It is discriminatory, I agree, and when we talk about having 50% of our Medical Corps in primary health care specialties, I think it would be those general physicians who would be called on most frequently to serve with the fleet. The superspecialists probably would not be called, if we don't have enough of them. Obviously, if you only had one neurosurgeon you wouldn't send him out.

Participant: We have 1.1 million outpatients a year in our medical center. I'm not going to give the line control of my physicians if they just come in at the last minute and pull the physicians out when we have scheduled appointments for them. We couldn't take care of our patients. That would put us at a terrible disadvantage.

RADM Rupnik: The commanding officer of the ship or the unit would not have absolute control. He would have control only under certain factored conditions. And as I understand

it, there would have to be a clear understanding among the Bureau of Medicine and Surgery, the Bureau of Naval Personnel, and the Marine Corps before we went into this. Those factored conditions would have to be clearly identified.

In other words, if the ship was going out on a deployment, you would be notified at least six months ahead of time. And if you had, say, 20 of your doctors going on similar deployments and your staff was going to be severely reduced, you would have time to tell the community that your hospital would have to reduce its workload in some areas. It would be a very complicated way of doing things, but that's the way it would have to operate.

Similarly, if the Marines were going out on a training exercise, they would have to give you enough advance notice so you could compensate for the loss of physicians and corpsmen at your facility.

One way that we would try to decrease the impact on any one facility would be to spread the "FAC" coded billets throughout the U.S. So if one unit went out, let's say from Camp Lejeune, you wouldn't wipe out the hospital at Camp Lejeune. You might take a few billets from all around the country. That's expensive, but it might be an answer.

Q. I think the American public is starting to recognize the role of the allied medical personnel—the nonphysician—in direct, primary care. So it seems to me we could try to educate our line commanders to the fact that nonphysicians can fill some of these requirements. I am talking about the supertrained technicians, whether you call them physician's assistants or better-trained independent duty corpsmen. They are supported by modern technology—teletransmission and videotransmission capability—and by better methods of patient evacuation. There are plenty of so-called medical officer billets that don't have to have medical officers in them. Do you agree?

RADM Rupnik: You are absolutely right, but our problem is that we do not identify line controlled billets. Line controlled billets are identified by our line bosses. We advise our line bosses as to whether they need a billet or not, but in the final analysis they decide whether they want a physician in that billet or whether they want a physician's assistant or an independent duty corpsman. I agree that there are many, many instances where physicians are not necessary, where a physician substitute or a physician's assistant can be used.

Of course, we are currently utilizing physician's assistants and independent duty corpsmen. If you compare what we are doing now with what is done during times of war, you'll see that we are using many, many more physician substitutes aboard our smaller vessels than we do during wartime.

The final answer is to get more people, and as I told you in the beginning, we are not getting larger numbers of people unless Congress changes the law.

Q. The physicians who are deploying now are expecting a three-month rotation. When do you expect a change in the program?

RADM Laning: Momentarily. It is being decided right now. Incidentally, you must realize these long deployments are mainly in the Pacific fleet, not the Atlantic fleet.

Q. RADM Rupnik, are these shortened deployments going to be affected by the increasing number of women coming aboard under the scholarship program?

RADM Rupnik: Sure. The more women we have, the fewer

men we have—and so these fewer men are going to have to be deployed more often.

Q. How can we get women physicians aboard combat vessels?

RADM Rupnik: We can't. That's a rule under the law that we have to adhere to. There is no way that we can get around that.

Q. Those of us in the field can only guess at what the mood in Washington is, but we have a feeling that the prevailing mood now is toward the line getting whatever they want. Are we doing anything to ensure that the line is aware of our problems in the delivery of health care?

RADM Rupnik: You may be assured that every flag officer in this room has talked at length to his line counterpart and explained the realities of the present situation. There comes a time, however, when your employer says, "You will do such-and-such" and you have two choices: either you do it, or you quit.

Participant: I find that many of our line colleagues are influenced by the criticism they hear in our regional medical centers about the medical care provided to the fleet. In the past you had to have two years in operational medicine before you were even considered for a residency. But then everybody said it was a terrible waste of time, and we should let people get on with their specialty education. So for a while we eliminated the requirement for operational experience. Now we are going back to that, but we've got to be sure that people know that these primary care physicians are providing excellent medicine. Our academic people must support that concept when talking to the line, instead of saying, "Oh, look at all the mistakes the ship's doctor or the guys out in the field made" or "Boy, if they had come in to us, we would have treated them differently." We are undermining ourselves.

RADM Rupnik: Well, I would like to think that doesn't happen very often in our health care facilities. I don't think that's the reason for the changes. The changes have occurred in response to periods of austerity. The bottom line in everything we are saying today is money. We are vying with weapons systems that are very expensive. Our line counterparts can't get enough money to build the weapons systems they think they need to carry out their mission, and they want us to take our share of the cut.

In the budget process, we go through what is called the "increment-decrement process." If we want something new, if we want something in addition to what we have now, we've got to identify something of equal value that we can give up. Or if they take a decrement on the line side, we take a share of that decrement on the Medical Department side. Even so, the line is looking for another way of obtaining health care services that would be less expensive than it is today.

If I were a line officer looking ahead five or ten years and I thought some other agency would take over health care in the U.S., I might be thinking like the line is thinking. I'd think, "Turn the dependent care over to somebody else. Let's just take care of the active-duty people." If you look at their side of it, they are not being illogical. It is costing them.

But we are looking at it from our side. We have an outstanding health care delivery system, and we would hate to see its quality diminished. But again, you get down to dollars. How much money is the Navy or the Congress willing to give us to support the total beneficiary categories that they are accountable for by law?

Notes & Announcements

DENTAL CONTINUING EDUCATION COURSES SET FOR MARCH

These dental continuing education courses will be offered in March 1977:

National Naval Dental Center, Bethesda, Md.

Complete dentures	14-18 Mar 1977
Occlusion	28-30 Mar 1977

Eleventh Naval District, San Diego, Calif.

Oral surgery	7-11 Mar 1977
Preventive dentistry	28-30 Mar 1977

U.S. Army Institute of Dental Research, Walter Reed Army Medical Center, Washington, D.C.

Periodontics	7-10 Mar 1977
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Requests for courses administered by the Commandant, Eleventh Naval District, should be submitted to: Commandant, Eleventh Naval District (Code 37), San Diego, Calif. Applications for other dental continuing education courses should be submitted to: Commanding Officer, Naval Health Sciences Education and Training Command (Code 5), National Naval Medical Center, Bethesda, Md. 20014. Applications should arrive six weeks before the course begins.

CONTINUING EDUCATION FOR NAVY NURSES

The Naval Health Sciences Education and Training Command will sponsor the following continuing education courses for Navy nurses:

Hypertension: A Symposium for Nurses (30 credit hours)
9-13 May 1977 NRMOC Oakland, Calif.

Covers nursing management of the hypertensive patient: treatment, risk factors, morbidity, mortality and etiology. Open to nurses whose primary interest is medical nursing.

Innovations in Ambulatory Health Care (30 credit hours)
28 Feb-4 Mar 1977 NARMC Pensacola, Fla.
21-25 Mar 1977 NRMOC San Diego, Calif.

Emphasizes latest concepts in outpatient medical care. Designed for nurses working with ambulatory patients.

Current Aspects of Maternal-Child Health (30 credit hours)
24-28 Jan 1977 NRMOC Long Beach, Calif.
18-22 April 1977 NRMOC Jacksonville, Fla.

A seminar for obstetric and pediatric nurses, focusing on nursing management of maternal and infant care in inpatient and ambulatory settings. Practical aspects of hospital care, equipment and therapy, and the changing role of the obstetric and pediatric practitioner will be considered.

Approximately 40 participants will be accepted for each course. The courses are open to Nurse Corps officers not currently assigned to an overseas billet; however, nurses assigned to Argentina, Newfoundland; Bermuda; Guantanamo Bay, Cuba; Keflavik, Iceland; and Roosevelt Roads, Puerto Rico, who have served at least six months on active duty may apply. The courses are also open to Nurse Corps officers of the inactive Reserve on a space-available basis.

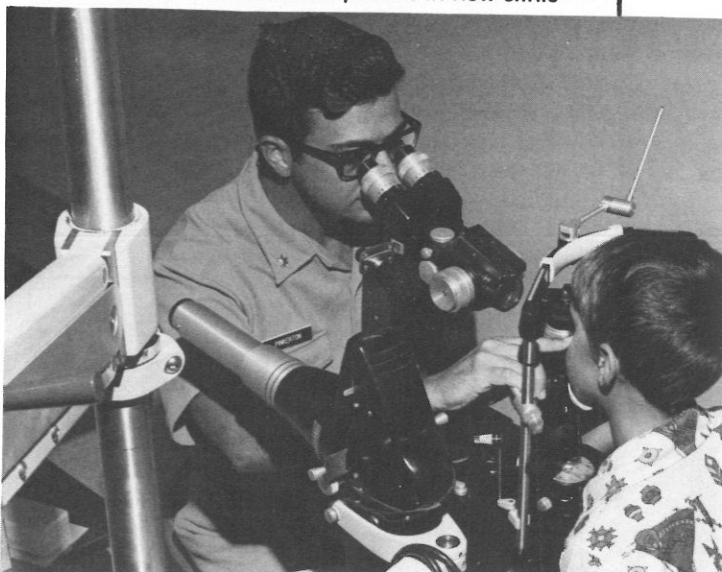
A list of accommodations will be forwarded to officers accepted for the courses. A limited number of spaces may be available in the bachelor officer quarters (BOQ) of the host regional medical center; reservations may be made by writing to the BOQ officer.

Nurse Corps officers wishing to attend these courses should apply to the Naval Health Sciences Education and Training Command (Code 7), National Naval Medical Center, Bethesda, Md., 20014, following procedures set forth in the BUMED Instruction 1520.8 series. Applications should be submitted several weeks before a course begins.

LEARNING DISABILITY CLINIC OPENS

A clinic for treating children with learning disabilities has opened in the Optometry Service of Naval Regional Medical Center, Corpus Christi, Tex. Children are referred to the clinic by their school or by a medical center pediatrician. After clinic staff members determine that the child is physically healthy, they administer a battery of tests to ascertain whether the child's visual development and performance, refractive status, ocular health or psycholinguistic ability plays any part in his learning disability. Parents receive reports describing their child's visual strengths and weaknesses, and suggesting a treatment plan.

Pediatric optometrist examines patient in new clinic



Reserves

Project Readiness '77

In 1973 and 1974, the Naval Reserve was restructured along functional lines according to the recommendations of the Reserve Analytical Study Project (RASP). In its final form, implemented under the authority of OPNAV Note 5400 of various dates in 1973 and 1974, the Selected Reserve was divided into ten major mission platforms and 24 subprograms of the Eleventh Program, Special and General Support. Although much turbulence accompanied this major reorganization, valuable lessons have been learned. With respect to the Medical Program, at least, a balanced force representing all health corps has been developed, and a cordial, cooperative working relationship has grown between active medical commands and the Reserve community.

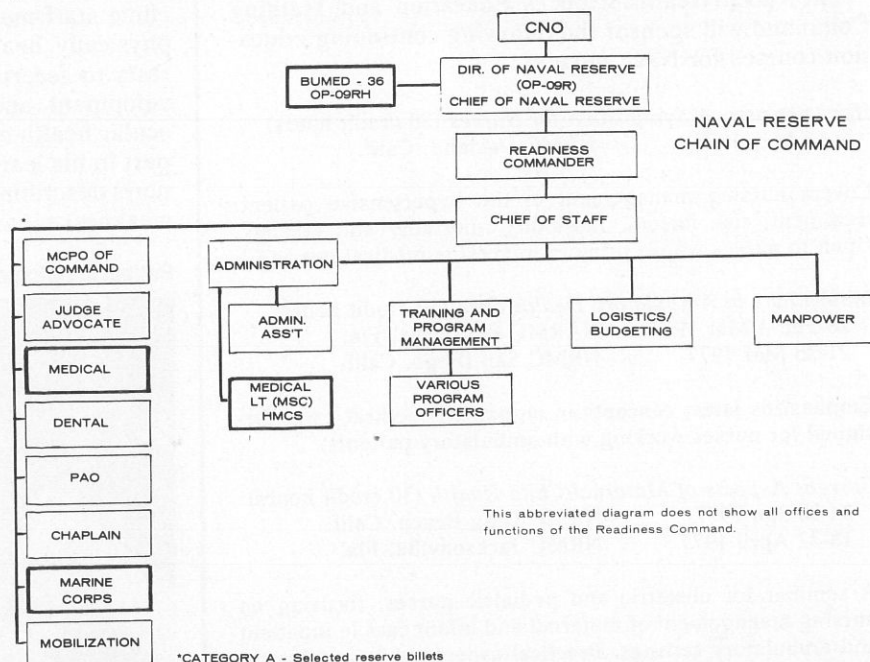
The fundamental unit of the Medical Program was the naval regional medical center reinforcement unit. These units contained billets for 950 officers and 1,877 enlisted and had as their mission the replacement of active personnel deployed from regional medical activities in support of the Fleet Marine Force upon mobilization. These were relatively low priority units in the context of the entire Reserve force, but they were well received on the active side and they did represent a new kind of training opportunity for all personnel, particularly hospital corpsmen, some nurses, and others who were not currently actively engaged in the health care field. Unit manning, initially slow to develop, has now risen to more than 67% for officers, and about 79% for enlisted; now drilling in the Medical Program are 308 Medical Corps officers, 50 Dental Corps officers, 120 Medical Service Corps officers, 163 Nurse Corps officers, and some 1,490 enlisted personnel. In addition to

the foregoing naval regional medical center units, there were established eight preventive medicine units (which were of higher priority and had a mission in support of the fleets and the Fourth Marine Division) and 40 naval regional dental centers.

Among the several objectives of the Chief of Naval Operations when he assumed that office was Objective 4.2: to determine the size and structure of the Naval Reserve. OP-605E was tasked with this responsibility. To validate the Selected Reserve requirements gathered from the total personnel requirement for full mobilization, OP-605E examined the Mobilization Manpower Allocation Resources Plan (M-MARP) of all major manpower claimants, and developed a notional figure of 101,600 for the Selected Reserve. The documents were delivered to each major manpower claimant, along with the

guidelines for submission. Each claimant was then asked to note his own mobilization requirements from mobilization until mobilization, plus three months. The guidelines were stringent and, for the most part, carefully followed. For a billet in the M-MARP to qualify as a billet in the Selected Reserve, it must be time-sensitive, that is, it must be filled in the first three months of mobilization. The assignment must require training, and the training must be of a type that the Navy can provide in the normal course of reserve drills and active duty for training. Finally—and this was most important for the Medical Program—the billet must support combat operations and must not simply augment the shore establishment.

In light of the last requirement, the naval regional medical center unit mission and mobilization assignment could not meet OP-605E criteria for Selected Reserve. Another program in the OPNAV Note 5400 series that contained large numbers of Medical Department personnel was Program 9, the Marine Corps Forces Program. In the Restructured Reserve, Program 9 was the naval support to the



This organization chart shows how Medical Reservists fit into the new structure of the Naval Reserve.

Fourth Marine Amphibious Force, a large nationwide Reserve organization under the claimancy of the Commandant of the Marine Corps and directed by an active-duty Commanding General and his staff at Camp Pendleton, Calif. The submission to OP-605E by the Commandant included, in addition to the support for the Fourth Marine Division, other substantial requirements for the First, Second and Third Marine Amphibious Forces which are active organizations at Camp Pendleton, Camp Lejeune, and Okinawa.

Submissions from other claimants showed a general decline in numbers of Medical Department personnel. The Chief of the Bureau of Medicine and Surgery submitted Selected Reserve billet requirements representing the eight preventive medicine units, 20 surgical and surgical support teams, four surgical platoon cadres and a neurosurgical augment, and two small advanced-base hospitals. The warfare sponsor for the new LHA-1 class of amphibious ships submitted billets sufficient to man the separate hospital capability designed into these ships, of which one, USS *Tarawa*, is in commission. In the final accounting, substantial billet losses are recorded in all health corps officer communities, with a slight increase in total requirements for hospital corpsmen. Table I shows current and projected billet strength in all programs and all health corps communities except dental, along with the numbers of personnel presently in a drill pay status.

Other major changes accompany the realignment of the Selected Reserve. Whereas RASP designed a program along functional lines and specifically identified a program sponsor for every function and every drilling reservist, OP-605E has created a model that integrates structure, function, and ultimate mobilization responsibility. In consonance with the policies of the Surgeon General, medically managed programs of the Selected Re-

TABLE I. Medical Reserve Billets and Bodies

	Medical Corps	Medical Service Corps	Nurse Corps	Hospital Corps
Current billets:				
Marines	148	9	0	1344
Medical	488	224	220	2037
Other	283	21	40	1307
Total	919	254	260	4688
Projected billets (Project Readiness '77)				
Marines	381	67	56	3449
Medical	107	66	91	646
Other	171	48	13	709
Total	659	181	160	4804

serve will now, and for the foreseeable future, stress operational medical support. It follows, then, that training programs and objectives will be tailored to the several missions now identified for the Medical Reserve, maintaining the emphasis on professional matters that has proved so successful in the naval regional medical center units of the past.

On 1 Oct 1976, all responsibilities of the district commandants for reserve affairs were transferred to

TABLE II. Naval Reserve Readiness Commands

Naval Reserve Readiness Command, Region One, Newport, R.I.
Naval Reserve Readiness Command, Region Two, Scotia, N.Y.
Naval Reserve Readiness Command, Region Four, Philadelphia, Pa.
Naval Reserve Readiness Command, Region Five, Ravenna, Ohio
Naval Reserve Readiness Command, Region Six, Washington, D.C.
Naval Reserve Readiness Command, Region Seven, Charleston, S.C.
Naval Reserve Readiness Command, Region Eight, Jacksonville, Fla.
Naval Reserve Readiness Command, Region Nine, Millington, Tenn.
Naval Reserve Readiness Command, Region Ten, New Orleans, La.
Naval Reserve Readiness Command, Region Eleven, Dallas, Tex.
Naval Reserve Readiness Command, Region Thirteen, Great Lakes, Ill.
Naval Reserve Readiness Command, Region Sixteen, Minneapolis, Minn.
Naval Reserve Readiness Command, Region Eighteen, Olathe, Kans.
Naval Reserve Readiness Command, Region Nineteen, San Diego, Calif.
Naval Reserve Readiness Command, Region Twenty, San Francisco, Calif.
Naval Reserve Readiness Command, Region Twenty-two, Seattle, Wash.

16 Readiness Commands (REDCOMs) (Table II), and the personnel from the six Reserve Supplements were transferred from the staffs of the district commandants to the staffs of the readiness commanders. Accompanying this modification in the chain of command, the Marine Corps Forces Program, soon to be the largest single resource area for Medical Department personnel, will pass under the administrative control of the REDCOM. The interface between drillers of the Naval Reserve and the Inspector Instructor and the Commandant of the Marine Corps will be handled by a Selected Reserve Marine officer, a billet for whom has been established on the REDCOM staff. Medical Programs will continue to be managed by an active-duty Medical Service Corps officer on each of five leading REDCOM staffs at Philadelphia, Charleston, Great Lakes, New Orleans, and San Diego. At each of the other REDCOMs a senior hospital corpsman will be assigned. On the inactive side, a Selected Reserve billet for an O-5 or an O-6 in Category A in designator 2105 or 2305 has been established on the Readiness Command staff. Administration of the Medical Program in the field is thus considerably decentralized and the chain of command is modified. Not all the 16 REDCOMs are fully operational at this time. Those indicated above as leading Readiness Commands are continuing to perform the major responsibilities of the Reserve Supplements which they have replaced. Manning of the other REDCOMs is expected to reach 80% to 90% by mid-1977.

The foregoing is the general shape of the medically managed programs of the Selected Reserve for Fiscal 1977. These billets are solid and defensible, if not flame-proof. It is a firm base on which to expand the reserve force over the next two years, as the second iteration of the Medical Contingency Study comes to be reflected in specific mobilization billets.—BUMED Code 36.

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